LIFE AND LETTERS OF PETER AND SUSAN LESLEY

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PETER AND SUSAN LESLEY

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OF

PETER AND SUSAN LESLEY

EDITED BY THEIR DAUGHTER

MARY LESLEY AMES

IN TWO VOLUMES

VOLUME II

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CHAPTER XXI

Illness, and Third Foreign Trip. 1866–1868

My father had been for some time failing in health. Whether the excitement of his three delightful months in Boston, was more than his always delicate nervous organization could endure, or whether there were other causes, the fact is clear that soon after his return to Philadelphia in the spring of 1866 he became very ill.

He then planned to go abroad for a few months, but as summer approached he became stronger and gave up the idea.

All through this season, however, he continued to suffer much with distressing nervous and brain symptoms, and also with bodily weakness, until it was evident that rest from mental labor must be had at any cost.

My mother sought the advice of the best physicians in Philadelphia, and each counselled an entire abandonment of work, change of scene, and a mild climate.

Difficult as it was to afford such things, my mother decided at once that they must be obtained. After a few days of preparation they sailed on October 6, for Havre, in the "Ville de Paris," in the hope that a year of absence from all that could remind him of his work, might restore his powers.

My mother was a very poor traveller, suffering invariably from every journey, but it was evident that her husband was now in no condition to go alone. The voyage proved very rough, and they disembarked at Brest rather than continue another twenty-four hours on board ship to reach Havre. As soon as she had recovered from the effects of the voyage, they spent a few weeks in Paris, and then went south to Pau, there to take up their quarters for the winter. The climate, however, did not suit my father, and, after seeing my mother pleasantly established in a *pension*, he tried travelling for a week or two in Northern Spain, and

a little later went into Italy for a more protracted stay. He had never as yet seen Italy, and surrendered himself at once to its charm. Although alone, he became much better, and was able to write long descriptions of all that he saw. He went as far south as Sorrento, and when spring opened, turned his steps northward, eager to rejoin my mother, yet loath to leave this enchanting southern land.

Before he had left America, he had been appointed one of the American Commissioners to the *Exposition Universelle*, to be opened in Paris April 1, 1867. He therefore felt it his duty to be present at the opening. My mother was already come to Paris from Pau when he arrived, and they were both made very much at home, and most kindly cared for, by their old and dear friends, Mr. and Mrs. Henry Towne, of Philadelphia.

Unfortunately, the sense of responsibility in regard to his duties as a commissioner, proved a serious disadvantage to my father. In Italy he had improved—in Paris he lost ground daily. In June he sent my mother to Switzerland, as she suffered from the city air; and after struggling for a few weeks more to attend the Exposition daily, and to write up his reports, etc., he followed her to Vevey, on the upper end of the Lake of Geneva. In the pretty suburb of La Tour, in a *pension* on the very edge of the lake, with the most beautiful of mountain and water views, they established themselves for the next five or six months. Here my mother remained almost constantly, while my father took a number of short excursions into different parts of Switzerland, going several times to spend a week with his old friend, Edward Désor at his mountain farm of the Combe Varin—above the Val de Travers in the Jura,—or at his town house in Neuchâtel.

As autumn approached and recovery still seemed far off, they began anxiously to wonder if it would be safe to return to America. They longed to return to their home and to their regular work, and to the two little daughters whom they had left well bestowed among friends in New England. But the doctors said *no*, emphatically.

As the autumn wore on, and their plans were yet un-

settled, letters from their old friends, Charles, Lucretia, and Susan Hale, gave them just the chance that was needed to make their winter most advantageous. Mr. Charles Hale had been made American consul-general of Egypt, and his two sisters had come out to spend the winter with him. They all begged my father and mother to join them in Cairo, and to accompany them in January, 1868, on a trip up the Nile, in one of the Viceroy's steam yachts. This was a rare opportunity for travel and for intercourse with old friends, and they gladly accepted the invitation.

After this memorable trip they spent two or three weeks in Italy, a week in Paris, and a month in England,—every day of which was a joy to my mother in her love of the mother country.

In May, 1868, after a stay of twenty months abroad, they returned to their own land. My father was much better, but still far from well. He knew that perhaps years must pass before he could again fully resume his old life of arduous labor.

In a letter of my mother from Pau, December 9, 1866, to one of the little daughters, is this charming description of one of their fellow-passengers on the steamer going over to Europe:—

We often noticed, in the cabin or on deck, a beautiful lady with a heavenly face, and the most exquisite golden hair you ever beheld. She wore no rats or mice or waterfalls,—she had no need, for her hair was so fine and so abundant. And it fell in heavy curls over her neck. There was such innocence and simplicity in her face, that I kept thinking of Wordsworth's Lucy, and saying to myself "Beauty born of murmuring sound, has passed into her face." And when she passed me in the morning to walk on deck for a half-hour, with her hair all down, I used to say to myself, "Yes, my dear, I don't doubt the sea air is beneficial to your back hair, but consider the heart of your too susceptible Punch." I did not know the name of this lady, so I always called her "My Golden-haired Lady," when I spoke of her to Papa. Well, the last Sunday of the voyage was a dreadful day. Everybody was worn out with the storm, and the frothy fashionable people, and the worn-out nurses and the cross babies, and the foolish young men, were all lying and sitting round

the cabin, and there was the awful roar of the storm without, and all the ship noises added to the noise within,—when suddenly My Golden-haired Lady, who was sitting apart with her own little family, rose and handing her baby to an older child, walked to the piano at the other end of the cabin, and she and her husband together sent such a wave of grand old harmony through that miserable cabin, that it was perfectly wonderful to see how soon every other sound was lost or drowned in it. They sang "Dundee," and "Jesus, Saviour of my Soul, let me to thy bosom fly," and no end of the finest and most glorious of the old hymns. Your Father and I were all worn out, and we wept like children. When she had finished, she picked up her little baby, and walked with a firm step through the cabin, where every one else was pitching about in a most disreputable way. I leaned forward and thanked her for the pleasure she had given us. "Oh!" she said simply, "I am so glad, I thought it would make it seem a little more like Sunday." Evidently Nature had bestowed on her its best gifts, fine health and a fine spirit, and glorious talents, and she rejoiced in them because they gave her the power of making others happy. I asked the Stewardess her name. "Oh, I don't know her name, Ma'am, she's the lady from Chicago." So next day, I saw her sketching, and I made bold to scrape acquaintance, by asking if she knew Mr. Collyer, our own Robert Collyer.—How her face lighted up as she said, "Oh, yes! he's a *very* dear friend." Then she told me her little history. How she had grown up in a Western wilderness. . . .

. . . Ah! my lady of Chicago, said I to myself, you are lost in the throng that have gone up to Paris for all sorts of reasons.—Not two moons will wax and wane, before I have forgotten all the discomforts of that wretched voyage. But the remembrance of your voice, reminding one of the Divine voice that once stilled the waves on Galilee, will never fade while Memory lasts. . . .

To this first travel-letter, my father added from Pau this pretty story, for the littlest daughter:—

A thousand years ago, the old Count of Béarn, who reigned at Morāās (a village about ten miles Northeast of Pau), bought this little hill to build a summer house on. And what do you think he paid for it? Not money. No. He promised that the shepherd and his heirs should always sit No. 1 at his table in the summer house when he came to visit him. After a good

many years, the Viscounts built a castle. Still the descendants of the old shepherd had the right to sit at the head of the table in the castle. One day a saucy noble from Paris was a guest. He scorned the shepherd. He would laugh at him. "Sir Shepherd," said he, "*how* do you whistle to the beasts you tend on those mountains yonder?" The shepherd was too polite and too proud to answer angrily. So he made a very little low whistle. "Oh!" laughed the Knight, "but you must whistle louder than that or your beasts will never hear you." "We only whistle very low, Sir Knight," replied the shepherd, "when the beasts are as close to us as you are to me." At this all the guests laughed —but it was at the Knight and not at the Shepherd.—I must keep other stories for a long letter when I am stronger.

PAU, *Dec.* 3, 1866. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

[Speaking of one of the young English fellow-boarders, she says:] . . . She is full of vivacity, full of interest in America, and really, finding such a listener, I have grown eloquent over our country. She was ill-informed and misinformed about everything, and she has wanted me to go back thirty years and give her the whole history of the rise and progress of the Anti-slavery sentiment, the causes that led to the war, the history of Kansas, the whole war itself. I have endeavored to be very accurate, and very clear, and unprejudiced, but I could not help being earnest. And it is all so entirely opposed to anything she has ever heard before, that she has been full of wonder. She says that she now understands America as she never did before, and sees how well grounded are our hopes for a great future, whatever transitory drawbacks lie between. . . .

Yesterday I took a little walk for the first time since I came to Pau. . . . The Pyrenees were magnificent, all covered with snow and the sunlight falling on them with alternate cloud shadows. Nothing could be finer. . . .

PAU, *Jan.* 4, 1867. SUSAN I. LESLEY TO HER HUSBAND.

. . . I cannot tell you how deeply interesting I have found the life of Perthes, and how I have lived in it all day. I have been carried far away from Pau, and introduced into the noblest society of German men and women who lived sixty years ago. There was always something perfectly charming and elevating in the relation between the men and women of that time and coun-

try. In my youth I continually met with allusions to many of these same friends, in the memoirs of Niebuhr and of Herder. In this life of Perthes, Herder and his noble wife, Madam Hensler, Klopstock and his Meta, the Princess Gallitzin, and many others, live and meet together in the most elevating and ennobling intercourse, and their correspondence is so removed from all the littlenesses of life, that one is lifted into another atmosphere. I find it more interesting than any novel. . . . Perthes mentions reading with delight Neander's "Life of St. Bernard." Have you ever read it? * . .

CETTE, *Jan.* 5, 1867. PETER LESLEY TO HIS WIFE.

. . . I carried my letter to you to the post, and on my way went into the palace at Toulouse. A quaint arcaded court-yard lay within it, curiously carved at either end, and a fine Latin inscription, like this

Hic Themis dat jura civibus,
Apollo laura camœnis,
Minerva munera artibus.

described the uses of the whole edifice and admitted you under a noble archway into other courts, staircases, bureaus, etc., etc., all labelled over the door, *à la Français*, as usual. I ascended one of the great staircases, through open doors, traversed some grand corridors, and entered a room marked "*Salle des Illustrês.*" Here I walked up and down, until my heart grew too hot with thoughts to bear. It was a superb hall, around the walls of which were arranged in groups the busts of all the most distinguished children of Toulouse; her poets, painters, philosophers, warriors, historians, and benefactors; in niches; underneath each of which was a dark square tablet; all alike; describing by name and eulogy (extracted ordinarily from some writing of authority, and the authority cited at the bottom) each celebrated man. There were fifty niches; but of these only about thirty were filled. There were fifty tablets; but twenty remained blank, for future heroes, sages or philanthropists. What a pub-

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* *Perthes*, Friedrich Christoph. A German publisher in Hamburg, later in Gotha. Born in Rudolstadt, 1772; died in Gotha, 1843. [His life was written by his son C. T. Perthes.]

Gallitzin, Princess (Amalie von Schmettau). Born at Berlin, August 28, 1748; died at Angelmode, near Münster, Westphalia, August 24, 1806. The wife of Dmitri Gallitzin (1738–1803), a noted adherent of pietism. (*Century Cyclopedia.*)

lic temptation to a noble—to the noblest life! This would be a laudable ambition—to live in such a place, with the eyes of one's soul's hopes fixed ever on a niche in this Walhalla. In the lower of the two tiers of busts, I noticed four alone together, occupying the space between two doors. Reading them from left to right, their names were Emmanuel Magnian, Peter Bulet, William Capel, and William Magan; the first called forth philosophy from its shades, being great among the early mathematicians; the second restored the degraded Latinity of his native land to pristine elegance, speaking the ancient tongue like Cicero himself; the third wrote all the history of Provence in truth, destroying a world of idle fables, which infested it; and the fourth was sent to Rome by the common council of his countrymen, to get the cause of poetry (*"joyosam"*) transferred from the cursed malice (*sacra malitia*) of the Cordelier monks, to the Court of Imperial truth; was captured by the Moors, publicly ransomed by the Count of ——, rejected with contempt all the offered rewards of Church and state, secure himself of everlasting fame, &c. I quote from memory. But what a noble group! And how artistically arranged! And what a study these four heads! The first, thoughtful and mediocre in form, the second massive, broad, high and grandly rounded; the third and fourth singularly alike, sharp and thin, with eyes close together and peaked beards. You would say from these four portrait heads, that you had here in the Toulousan land and streets, at least two widely divergent races of mankind; probably three. And so you have. It was the great original Druid Centre of government and worship in the South, before the Roman invasion, as Chartres was in the north of France. Then came Greek and Italian men. . . .

CETTE, *Jan.* 5, 1867. PETER LESLEY TO HIS WIFE.

. . . My ride to Marseilles was unsatisfactory in one respect: . . . they (my companions) insisted on having the dirty glass sashes drawn up, so that I lost many fine sights,—especially the run along the shore of the Lagoons and the Mediterranean, and the approach to the great Phocian City, which Lesseps' Canal is to make once more the London of the South of Europe. But I saw "The Desert" to perfection and a wonderful sight it was, —and what is better I got the true geological explanation of it, which the books do not give. How fond travellers are of saying such and such a phenomenon is an inexplicable marvel, and leaving it so! You remember perhaps that I said in my "Manual of Coal" that "a natural phenomenon lives in the immediate vicin-

ity of its own explanation." I was forcibly struck with the truth of my apothegm in this instance. I could see how the Mediterranean had once rolled its shallow waves over the "Desert," and gnawed away innumerable island shores and promontory cliffs, and spread their débris over the shallow bedded estuaries; while the Durance brought down from the Alps of Dauphiny millions of quartz and metamorphic pebbles for the waves to readjust. But it was impressive to see, for many miles in length and several miles in width, an area, dead level, covered with pebble stones, and utterly uninhabited, without a house or cot, or tree, or shrub, or blade of grass, or sheep, or living thing of any form; and that after passing from the luxuriant olive and mulberry orchards and vineyards of the Delta, and before coming to an equally highly cultivated region about Marseilles. . . .

MARSEILLES, *January* 6. TO HIS WIFE.

. . . One reflection I must make however. I tremble at the extravagance of our countrymen this year. Every American leaves, like a ship in a full-moon-lit sea, a *silver* wake behind; only that it is a permanent loss to the nation, and not mere moonshine sparkles, gone as soon as born. Ten steamers leave the United States per week loaded with reckless spendthrifts—for Continental prices rise to the American bait as they used to to the English. . . .

MARSEILLES, *Jan.* 8, 1867. TO HIS WIFE.

. . . My head is in perfect condition again or was, yesterday, until I tried it a little with two acts of that wonderful opera, 'l'Africaine," in an immensely crowded, hot house, with a grand orchestra and huge choruses. The unison aria of seven, near the close of the second act, is the most remarkable, weird thing I ever heard in opera—not to speak of other originalities quite as strong. The impression left was not of beauty or symmetry, as by "Fidelio," nor beauty of melody as by the "Barber of Seville," *et id omne genus*, nor of the grand grace of genius such as I feel in the "Don Giovanni," but of a certain awful magnitude, grandeur of wealth and resource, amplitude, multitude, I cannot tell what—but its best representative in the sister art will be the new Cathedral, half-finished on the great *quai* here. . . .

He was very sensitive to music always, but from the time of this nervous breakdown its effect was so powerful upon him that he was seldom able to allow himself more than

a short indulgence in listening to it. Often did we climb to the fourth gallery of the old Academy of Music in Philadelphia, and from there, in our favorite seat at one side over the stage, listen to the strains of some lovely aria or fine overture. Then after one act, or two at most, we descended quite satisfied. I remember once in a foreign town we suddenly heard the sound of singing, and leaning from our inn window, saw several hundred little children in procession, chanting a hymn as they marched. Children's voices are peculiarly touching, even when crude, and these were well trained and sweet. I felt a sob in my own throat, and turned anxiously to see how my father was standing it. He had drawn back from the window, and stood trembling from head to foot, and was as white as a sheet. It was an hour or more before he recovered from the shock. He often heard music in the combined noises of a crowd. It was not always the beauty of a refrain that moved or delighted him. Sometimes it was the long-drawn purity of a tone—in voice or instrument—or a succession of such tones, which roused his enthusiasm. On the other hand, the mere *continuance* of a sound gave him acute distress. He never could endure the deep burring of an organ, and on one occasion, when in a garrison town he happened to be standing by when a drummer marched round a large enclosure, rolling his drum on one unvarying note, my father stood it as long as he could, until his nervous distress became so great that it had to have some physical relief, and he seized the iron gratings which separated him from the barracks, and shook them long and violently.

GENOA, *Jan.* 11, 1867. TO HIS WIFE.

. . . Opposite the M. I. is the most beautiful church in Genoa, the Annunziata. Your imagination never pictured anything so gorgeous. It is not at all so large as Chartres; nor is its architecture gothic and light, ethereal, magical, exquisite, like that; nor solemn and sweet, like Notre Dame. But it is massive like St. Paul's, only not half so large; but then, St. Paul's is a barn to it; cold, and windy, and unsympathetic. This church is gorgeous, warm, homish yet imperially splendid; gold burns all over its architectural details—it is on fire of gold and

lovely colors. But then its paintings! Who can describe the thousands of frescos, all of them charming, lovely, radiant with sweet influences on the eye. In every architrave, in all the groins, in all the vertical and horizontal spaces, between pilasters, and above and below the architraves, around the side chapels, and in their ceilings, every inch of all that immense curtain-work, stands some apostle, prophet, martyr, symbol or sweet group of flowers, birds, or arabesques;—while every stone is either marble, white as a dove from Carrara, or mottled and inlaid from the Pyrenees. The fluted columns are white marble, with the flutes filled half-way up with fillets of mottled marble. The highest task of art, the harmony of colors with forms, is here accomplished. I shall never again speak against the Italian style. Like all things else it justifies itself. A new era has dawned upon my taste for this chiefest of all the arts. I wonder now how I could have come three times to the borders of Italy, and never felt the desire to enter it. I am on fire with a new enthusiasm to explore it. For I see now what this Italian style is capable of,—and for the first time. I got in fact an inkling of it, in the little church of the Rue des Dominicains, at Marseilles. But this surpasses all that that encouraged me to expect. Now I ask myself, what can St. Peter's be? I ask myself again how I could ever have been satisfied with the cold uncolored glories of Cologne or York Minster. I now comprehend why Louis IX. painted and gilded the Sainte Chapelle, and St. Denis, after his return from these Southern lands. I can even believe now that the Greeks *did* really tint the Parthenon.

[*Friday, January* 11.]

In the boat for Leghorn and Naples. We have had a jolly good day together, and a jollier dinner, with an Englishman who had just been to Athens to collect debts. . . . He gives a glowing account of the Acropolis, and a deplorable account of the Greeks . . . With him we had a reticent Englishman posting to London, who has posted us up in all the Italian railroads, etc., etc. Half a dozen other commercial travellers were at our end of the *table d'hôte*, at which we were all jabbering together, and alternately English and French, German and Italian, as it happened. These men are the best company in the world, educated, polite, polished, witty, full of fun, knowing everything, yet not pretentious nor obtrusive, and evidently honest and high-minded. I speak of all this class of commercial travellers, whenever and wherever I have met them. Any one of them is worth

twenty times his weight in English "gentlemen," and a hundred-fold his weight in English "officers," who are brutal, ignorant, conceited, afraid of everybody and dissatisfied with everything, unable to protect themselves and ready to bully the world.

The great theme here is the Unity of Italy,—the heaven-wide difference between the Northerner and the Southerner,—the superiority of the Piedmontese,—the suppression of the convents, —the call for money and the new taxes. They say the Government is about to tax all foreign artists. Miss Hosmer is said to have just received a hundred-thousand-dollar order for works of art to illustrate the war, for the Capitol at Washington. Story *is* in Rome. . . .

FLORENCE, *January* 17 (?). TO HIS WIFE.

. . . You are sure from all you notice, from the mighty walls, the arcades, the narrow doors, the ornaments, the luxurious court-yards, and back high-walled gardens, the fortified churches and belfries, that the citizen was a nobleman—even the mechanic was a warrior,—the *populi*—or rather the *plebs*, were the poor sheep—the toilers in the soil of the Campagna. The division between field hand and burgher or citizen, is marked upon all these lands. . . .

FLORENCE, *Jan.* 18, 1867. TO HIS WIFE.

. . . The charm of this Italian scenery lies in the frequent contrasts between dead plains and jagged groups of limestone mountains. The plains are exceedingly fertile and heavily populated, and contain all the modern cities. The hills around are crowded by the ancient cities of the Etruscans, and probably of aborigines, when the valleys formed arms of the sea; and with fortaliced and fortified baronial villages of the middle ages. Between Pisa and Lucca, you ride along a plain, between mountains which are evidently half-submerged. The sea formerly occupied the site of the plain, and bathed the feet of the hills. As you approach Lucca you see that you have left the plains of the Arno, for those of the Secchio, and these gradually narrow up into a pass between the foot-hills, backed by higher mountains. You see a solitary old tower on one of these hill tops; you see the great highway (and the railroad also) approach and hug the edge of the marshland; the river creeps close upon the other side of you, and you are now running along the top of its higher levees. Beyond the river, you notice other solitary towers, each on its hill top; presently you draw up at a station, beside a fortified gateway over the turnpike; a grand wall mounts

the hill side; you look up, and an immense fortress crowns the summit. After you have left this station, you look back and notice other solitary towers like sentinels, around this fortress; and on the other side of the river, you see a second fortress. What is all this? It is the gate of the Interior Country. Here Lucca kept watch and ward, not only for herself (two leagues in the rear), but for Florence and all the other cities grouped around her. It was through this gate that the Warriors of the Apennines passed out to beleaguer Pisa, and lay waste the seaboard; and through this the soldiers of Pisa and the seacoast rushed in to revenge themselves upon the Florentine cities. What a tale could these old towers tell, of centuries of violence and fraud, between the Guelphs and Ghibellines, the Blacks and Whites, the hostile factions of the Middle Ages! We call that the age of Italy's glory!—Italy's prosperity! It was her time of fever. Then it was that her merchants had their counting-houses in Pekin and Calcutta, at Novgorod and Bassora. Then it was that images of grace and grandeur were harvested out of the ateliers of a thousand artists; and these miracles of windowed walls, and arcaded domes, and sculptured towers, were accomplished, and chapels were ceiled with frescoes, and cased in precious stones, and cloisters grew for holding monuments as naturally as the white corolla of the lily grows to encase and preserve the mystic stamens and pistils which are instinct with the flower's ideas of immortality. While brothers murdered each other in the bed-chamber, and families of the same city fought under its archways and in its streets, Fra Angelico was gilding his saints and angels, and Donatello cutting patiently with a chisel out of the solid bronze the stones of the Crucifixion, the Ascension and the Judgment, for the two pulpits of the Church of San Lorenzo. While towers crumbled before the battering ram and the culverin, campaniles were rising to the music of Giotto's dreams. While Count Ugolino and his two sons and his two grandchildren were perishing of starvation in the Tour de Faim of Pisa, some Brunelleschi at Rome was devising the double ogive dome, or placing its immense rotundity upon the top walls of the octagon tower in Florence. Peaceful people lived and loved in those days of dread and civil storms; the pendulum lamp of San Martino at Pisa was teaching Galileo how to make a perfect clock, and how to measure the shape of the earth; and how many noble souls were building, amidst this perpetual clash of arms, invisible, immortal temples of the soul, Jerusalems and Romes, and Edens, in which all subsequent generations shall

be pleased to walk and live in happiness. Here sits in marble Arnolpho, still pondering on the walls of the great shrine he has produced—and here beside him sits Brunelleschi, looking up at his grand dome. I walk a hundred yards—and there, on that marble step, sat Dante in the flesh, dreaming out the stanzas of his immortal Comedy. Another square brings me to where Savonarola died, burnt, in the presence of the Florentine nobles and ecclesiastics, before the statue of the great Cosmo, and the palace fortress of the Duke.

What a strange medley! How history weaves her gobelin, goblin like, with a curl of the lip and a knit of the brows,—pouring along the endless fabric from the loom, parti-colored and full of figures,—and who can make them out? . . .

A few days later he journeyed towards Rome in company with his friends the Bairds, of Philadelphia, and writes:—

They make my ride agreeable in a hundred ways. He showed me verses in his pocket Virgil, illustrative of scenes we saw, especially the husbandmen ploughing with great slow-paced, cream-colored, large-horned oxen. . . .

How can I describe to you the entrance of the gorge, with Nerni on the hill, and the immense bridge of Augustus, below, under which we went? . . .

ROME, *Jan.* 26, 1867.

. . . The Dome of St. Peter. I shall never forget the moment when I saw it first—suddenly as the train rounded a hillside. . . .

Had I met Phaëton, driving a gentleman's carriage with a cockade on his hat,—or Ixion and Sisyphus (unless the vowels are to be reversed) in shooting jackets and bags, with a pair of double-barrelled Stub-twists over their shoulders, I should not have been more astonished than I was at the aspect of the City, as the great omnibus dashed along its well-built streets, or drew up to give the crowds of people a chance to get along. It looks like Genoa, like Florence, like Paris, like London, like Liverpool—quite. I wonder if the French have altered it. But after all, this appearance is as illusory as that which balks the geologist in studying the drift. As I roamed the streets to-day, I felt the antiquity of the place pervade me like the chill of an east wind, or like the odor of a fresh-wetted hay field, or like the calm of a still summer evening. Look on which hand I might,

some stone replied—"a thousand years"—"two thousand years." Mute—but how plainly one could hear the voice! The past walked on every side of me—clad in a heavy mantle, but I could see the fingers holding its edge. In front of my door was the obelisk. From my window I saw the tiles of the Pantheon (or whatever it is that covers the Dome). . . .

In a word,—Rome sums up all the world. One-half of it is ruin—that I see. The other half is splendidly alive, strong, handsome, well based, well built—that also is plain enough. Its crowded population also are a new surprise to me—not their numbers—but their beauty. The young men are especially fine-looking, gentlemanly, well-behaved, polite and clever fellows. There are cripples about indeed, and beggars not a few, and squalid and miserable old women; but the population as a whole is evidently well bred, well fed, well born, and capable of just as good a present and just as bright a future as the population of any city that I ever saw, not excepting even our own young cities of the North West. . . .

ROME, *Jan.* 28, 1867. TO HIS WIFE.

. . . The pages you were so good as to copy for me were very beautiful. I cannot imagine any one but Emerson writing them, and yet they are not quite his, either.

Yes—when we live too fast, we are on down gradients. But in this journey, I insist on noticing facts and describing details.

I had a long talk this morning with Mrs. Fitzsimmons, Daniel O'Connell's daughter, who sits near me at dinner, and looks the picture of her father, who left his heart to be buried here, when his corpse was taken home.

Did I ever tell you how I visited Theodore Parker's grave in Florence? I have left the flowers and leaves in Florence, with a packet of other things. But I send you in this a leaf or two from Shelley's grave, which I visited yesterday;—I have a sprig from Keats' grave. Bell, the Anatomist, is buried near him in the old Cemetery.

Mrs. Fitzsimmons was rather astonished to hear me say this morning that there was a statue superior in my estimation to the Apollo Belvedere, viz., the Christ at Stuttgart; and some at table had never heard that statue even mentioned as existing. But surely when the art in two works is equal, the idea will turn the scale, a perfect Christ in clay or marble must be superior to a perfect Apollo in clay or marble. Yet I confess to strange emotions as I looked at the Apollo. . . .

Strange, that not a Christian sentiment is awaked in my soul by these sights! Is it that they are so essentially pagan? or is it because the legends of the saints are such a ghastly fresco overlaid upon this nobler wall of paganism? I would rather be Marcus Aurelius than Gregory the Great, or Pius the Ninth; and I should rather have built the Baths of Caracalla than St. Peter's. . . .

These Churches are heavens within heavens. What a *tabula rasa* is our new world yet! Who are to be *our* future Raphaels, and Michael Angelos, our Bramantes and Peruginos? We have Guidos, and Salvator Rosas—but whence are we to receive—and when—our representatives of these god-like men of Rome? It is well for you and for me—that I did not come as far as Rome in 1845. No power on earth would have prevailed to prevent me from becoming a sculptor. . . .

ROME, *Jan.* 29, 1867. TO HIS WIFE.

. . . I have seen the Vatican, I have seen St. Peter's. . . . After coming out of St. Peter's, we walked towards the fountain. A crowd stood near the gate of the Vatican; we ran towards, and came up to a carriage, just as the Pope passed out of the arch, and was getting into the coach; a poor woman presented a petition to a mounted guardsman, who gave it to the secretary, who gave it to his holiness; the woman's face lit up, the crowd shouted, everybody took off their hats, the old man smiled and bowed, the horses pranced round the carriage door, the long traces stretched themselves, and away drove the Vicar of Christ across the grandest court-yard in the world. I was within six yards of him, and saw the expression of his good-natured countenance very well.

. . . Saw the pope again get into his carriage after his walk in one of the Allées; stopped at Conti's * studio to look at his fossils and his veiled busts, his Paris, and his head of Lincoln, of whom he spoke with enthusiasm. He has put this symbol on Lincoln's breast to represent, he told me, the breaking of the chains of slavery. Other things were there. I had read his memoirs on the pleiocene fossils of Monte Mario, and promised to return to talk more with the dear old man. Oh, if I had money to spend! There are two veiled busts here—oh, but they are lovely, . . . his Paris; his two slaves.

I went a mile further,—out via San Niccolò da Tolentino,

* Antonio Conti, sculptor, No. 75 C. Via Sistina.

and found Story's fine studio at the farthest end of it. In the first room, was his fine colossus Saul, Mr. Parker's bust, Judge Story, and other pieces,—his Medea, I think. . . . He came . . . to meet me with his hands full of modelling tools. I only stopped two minutes. . . .

ROME, *January* 31, 1867.

. . . While the multitudes of Turin are breaking open the bakeries to satisfy their famine, and the crowds of London are freezing and starving at once in the streets, I curse my soul's levities. Why should I be wasting hundreds of dollars on the lusts of the eye and the pride of life? Dear love, this life, this world is a great riddle. When I contrasted yesterday, in St. Peter's, the splendid garments of the Cardinals, and the glittering decorations of the ambassadors and princes, with the sackcloth of the monks, and the sheepskin breeches of the filthy peasants, as they brushed past each other—what, O Lord, is man, that thou art mindful of him, or the son of man that thou visitest him! And when I contrast the relics of the past with the ideas of the present, the Coliseum with the cotton factory, and printing-press; the obelisk with the locomotive; the martyrs' crypt with the gas-pipe and ocean cable, I seem to be studying the mutations of some star, which is only to be identified through them all, by its place in space; but whose genius, and substance, and destiny, and use, cannot enter into mortal knowledge; mystery of mysteries, all is mystery. The babble of politicians has become to my ears like the gabbling of the priests about the altar—they none of them comprehend these questions of finance, upon which they suppose the destinies of Empires to hang, and which nevertheless, it is quite plain, never affect the destiny of the smallest Kingdom. They patter about the "present crisis" as if history was not a chronic crisis. . . .

NAPLES, *February* 7, 1867.

. . . But, oh, my dear wife, how blessed is our lot across the water! I have done to-day what I always do in every large city, devote one good walk to the slums and stews; and I have seen a more wretched, sweltering mass of living beings, packed into narrower, darker, filthier quarters, than in any city this side of Edinburgh. Their overshadowed life has told upon the forms and faces well. They are dwarfish in stature; peaked, sallow, wrinkled, and hunger-bitten in countenance; not wicked-looking, but very miserable, sickly, anxious. . . . The people of Naples are a hard-working, active, trafficking race, but so put up in this

prison of a place, packed in such black holes of little shops, in such blind alleys of streets, into which rain falls and never dries, and sun never shines, so redolent of every disgusting odor *all of them* (except the Toledo), that heaven's own angels could do nothing with the place except to shake it with some mighty earthquake down, crush all its wretched people to death, then build a better city in its place, and stock it with a sound fresh race from the mountains between this and Rome. . . .

SORRENTO, *Feb.* 15, 1867. PETER LESLEY TO HIS BROTHER ALLEN.

. . . I cannot see how man can do without Idolatry. And the idol must have a shrine. Better therefore have the modern Mary of a thousand names, than the ancient Venus of the same thousand names. It is only in the study of the worship of the Deipara, that a philosophic mind can attain to adequate ideas of how Christianity has been fitted to Europe. If Christianity had succeeded in doing no more than this substitution of Mary for Venus, it would have been divine. But it has won still another world—it has substituted Jesus, for Mars and Bacchus.

I myself am a Pantheist. But if my Pan is better than the old horned and shag-thighed monster which you see everywhere in the penetralia of Pompeii, I owe the difference to the intervention of the two worships of Jesus and of Mary, between the destruction of that Greek Sodom and the settlement of Philadelphia by Wm. Penn.

What an opposition of names! In Geneva, and Florence, and Naples, I appreciate the benignant influence of the worship of the Virgin,—everywhere indeed, except at Paris and at Rome. At Paris, they seem to have substituted for the *Mater purissima* a French grisette dancing the Cancan; and at Rome, a filthy monk or lasciviously glancing priest. In all the votive or pilgrimage shrines to the *Vierge du bon secours*, for instance at the *Marie de la Garde*, overlooking Marseilles, I feel extremely touched by the silent tale of faith and suffering. How unlike one's emotions in the secret chamber of the Sibyl's cave on the banks of Lake Avernus! The Priests invented this—the other has grown like moss over stone, like wild rose, and thyme, and mignonette, from the human heart purified by—or if you refuse that word—watered by Christianity.

I see a thousand times as many evidences of a real and pure worship of Jesus Christ, than I believed before, could be discovered in Catholic countries. And I see that all of them worship him

as a man rather than as a God; as crucified rather than as imperial. It is the same Mary spirit applied to Jesu-olatry. The human heart longs for a bosom to comfort itself upon, longs for advice, support, some source of higher law. Nor will a book suffice—whether in the form of ten tables, or of the Christian Scriptures. A priest serves the purpose better. A Christ still better. But the strong, sweet woman's eye to divine, and hand to restrain, lift up, and lead forward—best of all.

I take it therefore, that Christianity will endure forever, in the form of the worship of Mary chiefly. Our Protestant rationalism is self-destructive, although out of its decay as a religious worship, will always flourish rankly all kinds of science, the mechanic arts, and the more intellectual forms of deism, ending in pantheism.

But this eternal, immutable beneficent All Father—who is he? and where is he to be found?

Who shall ascend his holy hill? And who shall worship in his temple? He that hath clean hands and a pure heart. Speaking no guile; loving justice and mercy, the father of the fatherless, and a husband to the widow. He shall know of the things, which of them are of God. . . .

SORRENTO, *Feb.* 16, 1867. PETER LESLEY TO L. [JOSEPH LYMAN].

. . . It is about time for me to break my fetters of silence, I think, as I have reached a sort of Elysian field, the beauty of which might make the born dumb sing. Here Tasso wrote his Jerusalem Delivered. Yonder Virgil wrote the Æneid. What fool but must become a poet under such a sky, in presence of such a sea, beneath such cliffs, before such islands, amid orange groves, face to face with Vesuvius and Pompeii? Other parts of Italy are beautiful; this is celestial. Even science here puts on the chaplet, and reclines upon the couch of Lucullus, pours out libations to Bacchus, and prefers the Georgics to the Novum Organum. How utterly indifferent one grows in such a place to all the ordinary topics of physical inquiry! There is an æsthesia in the very wind you breathe. Color and form absolve the intellect from every duty, and for every folly of the imagination. I rode my long-eared donkey to-day up the rocky staircases leading over the hills to Massa, and nothing pleased me better than when he threw up his head and began to bray, setting the whole cavalcade off into an infernal oratorio, as if they had just begun to take in the exquisite splendors of the scenery. It sounded like some weird echo from the animal world, of the fine laughter which filled our own

human souls at the unrivalled wit of Nature, here brought to the last pitch of perfection. [Followed by a lovely description.]

. . . I live in this sensuous absorption of the visible, so constantly now that I have nothing else to say. As for causes and methods of production, I feel no interest in them any more. I know that these rocks are Oölite—but they might just as well be Silurian, for all I care. I see that anticlinals cross the peninsula thus:—[sketch], producing by their gentle dips these frightful limestone precipices, and jutting promontories, and parallel jagged ridges, *across* its axis; but I feel no desire to make a study of its topography, for its beauty overwhelms my logical intellect, with a sea of sensuous enjoyments. . . .

But a later letter is full of geological drawings of the coast line, with text explanations.

SORRENTO, *Feb.* 22, 1867. PETER LESLEY TO HIS WIFE.

. . . My recovery to health, I believe, is to be minus the brains. I can't read a book—"by Minerwa"—not even Murray! Think of that. Mrs. Hanke gave me a sweet *tract* to read yesterday, about the scheme of redemption, which you find so incomprehensible—and, would you believe it? I read the first page or two over and over while they were discussing Napoleon's late speech to the Deputies, round the fireplace, and I couldn't understand a word of it! No more than the politicians can that oracular utterance in the Tuileries. I must surely be becoming stupid and fat. . . .

Any connected writing troubles me afterward. I can only bear such harum-scarum pattering like this; and not too much of this. But I am perfectly happy all the time,—all and every day.

His two weeks in Sorrento, among pleasant companions, were most beneficial. He writes of being very well and very happy. In the last-quoted letter he exclaims:—

I feel so well when I get up! I eat such huge breakfasts! I am ready for anything. You would laugh for joy. And I am so funny all the time!! I keep the breakfast and dinner table in a roar. I am so excessively witty!!! I say so many hundreds of good things! You wouldn't know your stupid old Peter.

But letters went astray. He became anxious about my mother, and started northward too soon, encountering cold weather, had a slight chill, and all the good of this Italian trip seemed lost. He reached Paris very little better than when he left Pau.

My mother's winter in Pau had been spent alone, among somewhat uncongenial surroundings; yet she wrote to my father February 27, 1867, when she was about to leave for Paris:—

I have been very happy here, and you can hardly believe what a wrench it is to me, to leave my lovely sunny room, and the good Jeanne; and my occupation in the sick-room has been very absorbing. In fact, you know I am an old cat, and will always take root in spots, and all change is hateful to me.

Indeed, here, as elsewhere, she had found plenty to occupy her hands and heart. A young girl, consumptive, about to be married, had interested her much, and the young husband-to-be equally. The girl became very ill, and my mother devoted herself to her, spending hours daily in her room, not leaving her until, as a bride, she was carried off to another home, where she lived but a few months.

She had also become much attached to her husband's old friend, *Pasteur* Bost, whose home was now in Pau, and who had become a feeble old man.

There were others of the household to whom she had become attached, notably the overworked landlady, an unfortunate governess, and the good Jeanne, the general housemaid, who wept when she bade her farewell.

In answer to an anxious letter from my father, anxious as to her health and happiness, she writes:—

How can I, . . . with these miles between us, convey to my dear husband this positive truth, that in myself I am *always* happy; my spirit never knows a cloud! This is not my virtue or my fault, the good God sent me into the world with this happy spirit. Why I should have it permanently, and you, who are so much wiser and better than I, should have been subjected to the

trial of changing moods, I cannot tell; but I must rejoice in my gift, and you will bear patiently your cross. . . .

ROME, *March* 4, 1867. PETER LESLEY TO HIS WIFE.

. . . Did I tell you how on Saturday I spent two happy hours with Wm. Story? His Delilah just finished is very superb. I wish I could write a poem on it for the *Atlantic*. . . .

FLORENCE, *March* 7, 1867. TO HIS WIFE.

. . . All I can do for you to-day is to enclose the beautiful photograph which the dear old man* presented to me this afternoon. I had a delightful time with him in his studio. He was delighted with my admiration of his Eve, and still more with his Faith (see Photograph). He took me to see his Hope, just blocked out, and not equal to the Faith. "I must make the Charity excel both, you know," said he, in the simplest manner. "It will take all your powers," I replied. He showed me how he got the sight in the eyes, by imitating the natural eye. Look at the photograph, and you will notice the *iris elevated*, as in nature, and one lacrimal gland depressed and the other pressed forward, as in all side rolling of the balls must happen. Then he showed what I never comprehended before, and often sought to know, the *flesh graining*, like orange peel surfaces; and how he gets this in modelling his statues in plaster, but can't get it in modelling his busts in clay, nor in cutting the marble surface itself. Canova used acid, to get it up on his marble; but acid leaves a gloss. With *infinite pains* it can be got with tools; but no one will spare that much time. . . .

Passing through the parlor, he showed me a bronze copy of the cast from Napoleon First's head, given to him by the physician of Madame Murat. Canova's head of him is totally false. His actual skull was narrow-browed, but with a perfect curve from nose to crown. He had high cheek-bones, and looked full-face like an Indian. He was not intellectual as to any powers of *reasoning*, and wrote lots of trash at St. Helena, which were all destroyed by his friends. His powers of mind were grandly *perceptive*. . . .

Then I walked to Powers' studio.

. . . For the third time, I visited Theodore Parker's grave and got another wreath from among its violets. I also found

*I have been unable to discover what sculptor this is, Ball and Palmer were too young at this date.— EDITOR.

a medallion tombstone, erected lately, by the Lyells to their old Father Leonard Horner, who died in March, 1864, two months after I dined with him at Lyell's table. . . .

The Doctor [Dean?] begged me to tell you to put me into a particularly straight jacket, and said he should feel quite relieved when he received a letter from us announcing the fact. They seem to consider me a most reckless individual, but I am a model of selfish prudence and egotistical forethought and discretion. The dear Lord knows, I do nothing from morning to night but think what will hurt and what will help me to get well. I am disgusted with the finest statues, when I see that they bear the symbols of Æsculapius or Hygieia. . . .

PADUA, *March* 11, 1867. TO HIS WIFE.

. . . To give you a notion of the disadvantages one's philology is at during a rapid transit across ancient political boundaries;—the *garçon* asked me in Italian if I wished some *oysters* [*Austern*]. I replied in German, "No, God forbid, I am an American." At which he stood thunderstruck,—and very justly,—but I thought he had asked me if I were not an Austrian; also very reasonably; for when I had before that asked another *garçon* if he spoke German—he retired into another room, and for five minutes all the *garçons* there assembled kept saying to one another, "Sprikers sie Taitscht." . . .

VENICE, *March* 12, 1867. TO HIS WIFE.

. . . You know my theory is, that Venice received its name, not from the Veneti, but from Venus; and that the Doge's palace represents an ark floating upon water, the waves of which are symbolized in its arcades. I got my first glance at it last evening, after my arrival, towards dark, and although it was not light enough to bring out all its beauty I was as much impressed with it as I expected to be; and the impression confirmed rather than opposed my theory. . . .

Ah, this sad, dreary, beautiful, unhappy city! Hunger sits on the cheeks of its inhabitants. Free! yes, free to starve! They may well say it. No lover of his kind need wish to come to Venice now. And how can Venice fail to starve! Where is her ancient commerce? What does she make for a livelihood? Nothing—not even cigars. . . .

I was interrupted by music from the water side, and going down to the front door, I listened for an hour on the steps to the choral singing of a large gondola tied to the posts in front of

the house, serenading an actress in a room above. The Maestro and a gondolier, and a couple of servants, stood by me on the steps. Echoes came back from the houses on the other shore of the Grand Canal. I could discern dark gondolas creeping to and fro, in mid stream. Gas burners, at intervals along the further bank, made long columns of light in the water. The voices of gondoliers were heard, clustered on the wharf near by, to listen and criticise. The singing was wild, yet smacked of the opera; funny, yet artistic. . . .

MILAN, *March* 17, 1867. TO HIS WIFE.

. . . I told you I went yesterday to the Brera Museum. . . . My favorite of all the gallery I think is the Van Dyke's Holy Family . . . the little Christ giving his hand to a monk to kiss. But if I could carry off any picture it would be the one little (Kit-cat size) Murillo (135, in the corner of the little room), the loveliest, sweetest Aunt Hall of an old Christian Woman, bent forward in her chair, and smiling to herself as if she had seen heaven, and was thinking it over *all to herself* unconscious of the world.

But you ask me, perhaps, what I think of the Cathedral. I spent the whole afternoon climbing about its roof, hanging over its battlements, peeping into its arcades, counting and admiring its statues, and hanging like a bird from the top of its spire, just under the great statue of the Virgin, and looking out over the City, the plain of Lombardy, the Alps and Apennines. It is the superbest church yet built by man. The world contains no equal to it. It is the Apollo, Cöln the Venus, St. Peter's the Hercules of Church Architecture. I have wandered through its aisles many times. I go every few hours during each day—and I never see it the same. It varies, as the sky and the landscape varies. It is *to appearance* much larger than St. Peter's. It has so vast a number of piers, and they are so vast in themselves, and so composed of clusters each one, that the Alleghany forest is not more imposing. . . .

My father reached Paris before the opening of the Exposition, and he and my mother spent the remainder of the spring there. In spite of the kindness of their friends, the Townes, and the presence of my mother's sister, Mrs. Delano, and her family in the city, it was not a happy or comfortable period. My father was again ill, and my mother

disliked Paris and the life there. In a letter of May 7, to her aunt Catherine Robbins, she says:—

> I envy any poor body in America, living on the merest salary and in the humblest place, with ability to do his work, for I have seen no life on this side that seems to compare with interest to that at home. And what on earth people want to educate their children here for, is more than I can tell. . . .

In June my mother was obliged by ill-health to leave Paris, and went alone to Vevey, at the upper end of the Lake of Geneva, where she took rooms in a charming *pension* on the edge of the lake. My father remained in Paris until the end of June, struggling to perform his duties as commissioner, but very ill much of the time and feeling himself inadequate to do the work as he felt it should be done. At the end of June he joined his wife at Vevey, and here they remained until December. During the summer and autumn he made a few trips (usually alone) into other parts of Switzerland. The pleasantest of these little journeys were to the homes of his friend Désor.

COMBE VARIN, *July* 5, 1867. PETER LESLEY TO HIS WIFE.

. . . Day before yesterday I missed the train by quarter of an hour at the La Tour [Vevey] station; but unwilling to disturb you again, I sat awhile under the trees behind the old Church Tower, so beautifully moss and ivy clad to its spire, and then had my ambrosial locks shorn in the village; tried for a breakfast, and got nothing but a bowl of soup at the *quai* in Vevey; took the one o'clock cars for Lausanne; enjoyed my ride by Yverdun, under the fine old castle of Grandson, and along the lake shore toward Neuchâtel; fell into talk with people who advised me to descend at Auvernier, and wait for the back train to Paris; got into the wrong train, and had the mortification of being carried back to Columbiers; took a goods train at five, and went to Neuchâtel to sleep. A fine-looking "Professor" took charge of me on reaching the little city; led me to Désor's house; learned for me that he had been in town that morning, but had returned [to the Combe Varin] in the very train I ought to have caught at Auvernier; then led me through the town and described to me all its public buildings, until we arrived at Le Faucon Hôtel,

where he left me, apologizing for not taking me to his own house, by saying that his wife was very ill.

After a good dinner I walked on the beautiful new boulevard along the shore, and fed my eyes on the superb diorama of the entire range of the Alps; slept well; rose early; and took the morning cars for Noiraigue.

. . . After a most interesting ride through the wonderful gorges by which the road to France penetrates to the Val de Travers, I got out at Noiraigue, and addressed in French a young man, to know if he could put me upon the foot-path up the cliffs which tower so grandly over the village. In honest American English he replied—"why, I know you; you are Professor——." "And you?" I asked. "I am Mr. Shaler, of Cambridge. I am studying the Jura." "Come up with me then, to see Désor," I said. "I will," he replied, "Agassiz told me I must see Désor—but he could not give me a letter to him,—but I am to meet here a young English geologist, devoted to Purbeck fossils,—oh! there he is—Mr. Tancy [or Taney?], Professor Lesley"—etc., etc.—Lucky, wasn't I? So I hired a boy for a guide, and to carry my satchel and coat; and up the cliffs we started.

What a charming time we had! I became a humble scholar, and they taught me Velangien, Neocomien, Astartien, Oxfordien, and gave me fossils, which my old bleared eyes could no longer detect, but which they found wherever they looked, in the rubbish of the roadside. Slowly we toiled up the steeps—stopping at every yard or two, to draw diagrams in the sand, or to speculate on the structure, or to glorify the divine scenery.

Désor's chalet is hid behind a little ridge, and commands a glorious mountain basin full of peat beds and sink-holes. He received me in the most friendly way, and insisted on my companions stopping to dine. We had jolly times. After dinner he led us to a seat (through the woods) facing the Val de Travers. He told us everything. He then took us down the road,* and

* The avenue leading to Mr. Désor's house was an interesting part of his farm. It was a country road, with tall trees of various kinds on each side, and was an eighth or perhaps quarter of a mile long. On each of these trees was carved the name of some visitor to the Combe Varin. Many were the distinguished names inscribed thus in this retired lane. I remember seeing in later years my father's tree. It was some sort of a tall tree with little quivering leaves (perhaps an aspen), and seemed to me appropriate to his sensitive and alert nature.

At a little distance from this avenue, below the farm-house, toward the peat bog, was one of the "sink-holes" mentioned by my father in his letter. Beside it stood a double-headed oak, and on this tree Theodore Parker's name was inscribed.

dismissed the young men, delighted with their adventure; then led us up another road to the mountain top, talking about all his friends in the U.S.; and so by the Meadows to his peat bogs, and back to the house. All the evening we talked of Gould, Agassiz, Lyman, the Academy, etc., etc.

It was bitter cold—but I slept well in Joseph Lyman's room, and have had a good breakfast, and a long talk about *Pfhalbauten*, and young Morse's new professorship, and you, etc., etc. To-night friends come from Neuchâtel to spend Sunday.

COMBE VARIN, *July* 7, 1867. TO HIS WIFE.

Yesterday was a great day. After a pleasant talk at and after breakfast with Désor, I was left alone before a blazing fire, with Sir James Y. Simpson's fine new book on the Cup and Ring Sculpture of the Druids, until half-past eleven, when a troop of six young men came in to get a lesson from Désor. I left the house, and went up through the trees to the little belvedere he has perched on the end of the projecting crag. Soon, he and his troop came talking and laughing through the wood to the same place. Seated on the sill of the shed, and the boys around him, note book in hand, and all the vales of Brat, Travers, &c., stretched in grand procession before and below him, I standing and listening by, he expounded the distinction between *Vallon* and *Vallée*, *cluse* and *combe*, showed the order of the rocks, the place of the bitumen, and the structure of the region. [Here follows a geological sketch map of the valley, hills, Combe Varin, etc.]

After enjoying a fine dinner with the boys, we went to the end of the barn, whereon a Roman soldier is painted, and threw at him with darts made with spear-heads, discovered in the lake dwellings. Then we started along the top of the mountain, westward, and in about four miles, took certain steep foot-paths, and wood roads, studying the mountain side, until we passed the great *débâcle*, of which J. J. Rousseau wrote, while he was living in the neighborhood, and which threatened to overwhelm Travers. At last we reached the foot, and crossed the railroad to the river, and ascended the terrace on the other side, examining the petroleum rock and quarries, and returned to Travers, past four boring holes, in one of which they were still at work, and had reached to within two or three feet of the petroleum rock, as Désor knew by the little nummelites, which were very numerous in the stuff they brought up. At the hole, we lay on the ground to rest nearly an hour, and then walked to Travers. . . . Désor's wagon

came, and he drove me down the valley and up the Mountain side to Combe Varin: the boys walking on to Noiraigue to take the cars to Neuchâtel. . . .

Monday. . . . There is something marvellous in this mountain air, Désor says that you must come and breathe it. Liebig can't come until September; but Vogt, and Eisenlohr, and Bunsen, and Frazer [rest of letter lost]. . . .

NEUCHÂTEL, *Oct.* 17, 1867. TO HIS WIFE.

. . . On my arrival, Désor was not at home; but Marie [his housekeeper] received me with her usual *bonhomie*. . .

At seven o'clock Désor came home from presiding at an important annual meeting of the City Council—for the election takes place this week. We immediately began upon our favorite subjects and talked incessantly through supper-time. . . .

[Apropos to new discoveries showing the vast antiquity of man is the following:—]

Désor has already posted me upon the main points—he says that the Abbé Bourgeoise did not even dare to read his *tertiary* man relics at the Congress in Paris; and everybody was of the opinion that nothing more had better be said about it. . . . He says that Pictet saw at once that the Sanskrit scratchings were a silly forgery, for the foolish fellows had unwittingly selected a *modern* style of Sanskrit letters!—He says that Paul Gervais, who calls the Neanderthal skull an acknowledged modification of a *celtic* dolicocephalic skull, did not even make his appearance once in the Congress,—was afraid to, in fact.—He showed me Vogt's splendid new work on the small-headed simpletons of Berne, the skulls of which are almost fac-similes of the Neanderthal skull.—We discussed the possible existence of the Eliphas antiques, and of man before the rise of the Alps! . . . Then he told me of his scientific quarrel (now raging) with Dove and the "schoolmasters," about the origin of the Föhn or snow-eating African wind. He says the snow of all the Grison country was covered last year with a brown powder, which turned out to be *gypsum* dust, such as he saw blowing about on the Sahara. . . . We talked about your plans—Frazer—Shaler—Lesquereux.—Good-night. . . .

NEUCHÂTEL, 19*th*, 1867. TO HIS WIFE.

. . . I worked hard all day. [He was going over his Lowell Lectures for immediate publication by Trübner & Co., London.]

In spite of interruptions Désor gave me the whole day, and

discussed with me all the doubtful points, moderating some of my expressions, and changing some of my facts. He is kindness and courtesy personified, and takes the most real interest in the book. He has just given me a copy of his new and handsome edition of his German palafittes. His boxes of casts from Lartet's bones, with figures on them, afford most extraordinary sights. I shall have some things to add in my appendix. But I feel to-day a little worn. . . .

Désor continually says; "you are not in a hurry? Eh? You are not in a hurry? Eh?" . . .

He gets me nice things to eat, and I am like an old horse put into a clover field to browse and rest. . . .

NEUCHÂTEL, *Oct.* 22, 1867. TO HIS WIFE.

. . . I have worked hard every day, for five or six hours per day, and spent the rest of my time "making a beast of myself" with all sorts of flesh, and fruit, and fine wines, and jolly talks with Désor and four or five friends, one or other of whom always drops in before we get done dinner to drink coffee, taste his pears, smoke, and gossip for a couple of hours. Every evening, he has been out on City Council or Zürich Cholera Collection Committee business; and three times we have taken walks together.

This afternoon, he and M. Borel took me along the quais, and up to the church, which they are renovating.

The astronomer Hirsh took tea with us.

Yesterday, Jachard, the geologist, came down from Locle to spend the day.

Mr. Marchand, Mr. Favre, etc., etc. . . .

I have mailed the tenth and eleventh proofs to-day, with three or four pages of new matter to insert in them. A great task is finished. I have had huge discussions on geological points connected with the palafittes and caves.

. . . Désor begs me to stay to see the Palafitte of St. Aubin —and the old Roman site of Aventicum—the observatory—the museum—the manufactory of telegraphic machines, etc., etc.

But I am getting tired, and long for my Dumas, and laziness, and you.

Désor's birds are a great resource; his library a greater. He lets me alone, and I him, all the morning.

My grandmother Lyman died in the spring of 1867, and also my father's old aunt, Harriet Hall.

LA TOUR, VEVEY, *June* 15, 1867. SUSAN I. LESLEY TO HER CHILDREN.

. . . All this week I have been living with her [grandmother] in thought.

Death seems to have restored her to me, as she was in the dear old days, so full of life and warmth and sunshine. How I wish I could bring before you a vivid picture of the dear Grandmother, to whom you owe so much. And it pains me to think that you can have no living remembrance of her, when you come to be women, for she loved you both dearly. I was but a little girl, much younger than Meggie, when I used to sit on a little stool by her side, and repeat Watts' Hymns; and many a lesson that I have taught to you, I learned from her strong heart and clear insight. Several things made an intense impression on me, from her very forcible way of putting them. I recall the emphasis with which she repeated "How proud we are, how fond to show, Our Clothes, and call them rich and new," and how I used to say it, in the same tone. Her whole manner made me feel, that to value ourselves or others on account of any *external* possession or advantage, was perfectly despicable; and to this day I feel an inward contempt for such things, that I have learned to control with difficulty, and to modify so far as to know that kindness of heart and other good qualities do sometimes belong to very vain and silly people. Another grand lesson I learned from your dear Grandmother, was never to lose an opportunity. She looked on life as a grand series of opportunities. Every day, and every hour, furnished them in wonderful and varying succession.—Not to see them, not to realize them when they were before our eyes, not to lay hands on them, seemed to her a wicked waste, a lack of spiritual insight, which she could not understand, or have patience with. Did a little boy come to the house of an errand, or a poor woman stop to sell fruit, she knew at a glance all about them. "Susan, take that child to the porch," she would say, "and let him see so and so; or, take that woman and give her something to eat; or, it is a hot day, tell her to sit down in the shade, and get her some cool water." And if such people came when she was out, and no one had thought of it, I shall never forget the wave of her hand, or the tremendous way in which she said "*Lost* your *opportunity!*" It used to frighten me a good deal when I was a little girl, for I was a weakly, timid child. But, oh, how glad I have been of it no end of times since I was a grown woman! it taught me to keep my eyes and heart open. Then in

the same way that she hated to see opportunities wasted, she hated to see time wasted. When your aunt Katie and I, two little girls, used to go and bid her good-night, she looked at us very hard, and said, "Children, where are your Monuments?" Then if we had done anything during the day, we made much haste to tell of it, or show our work.—But if we had no monuments, we shrunk away to bed, feeling more ashamed than I can give you any idea of. She loved to give us pleasure. Her affection for us was as warm and true and tender as love could be; but I think she had a very high estimate of children's souls, and very little of their bodies; and although she erred in the latter respect, I think her love was of the strongest kind. When I was about four years old, I sat upon the doorstep, looking at a picture book. I was a pretty child, with long golden curls, which my sister Mary loved to wet and twist around her fingers. Some neighbor passing by stopped to look at me, and praised my beautiful eyes and my long ringlets. Your grandmother was sweeping the front entry and heard the lady. You never saw anything like her indignation. She made a rush for the front door, seized me by the arm, and slamming the door in the lady's face, she said, "I would a great deal rather you should stick pins into my child, than talk any such stuff as that." I had been hanging my head, simpering, and feeling highly pleased at myself, but I guess you never saw a little mortal more suddenly taken down. The broom was put away in no time, I was seated between my Mother's knees, while she with shears in hand cut off all my golden curls and cropped me close. "Oh, dear!" I kept saying, "Sister Mary'll be undone, she'll be undone." But little did that matter to my dear good Mother. She had taken to heart one maxim of our Blessed Master's, which is, that "if the right eye or the right hand offend you, cut it off, and cast it from you."

. . . Oh, little girls! Mary and Meggie, when I am dead and gone you will call to mind your Mother, as I am now recalling mine, if God shall spare your lives. And while I cannot think of my dear Mother without emotion and tenderness that makes the tears flow, I want to think of her truthfully, and to have you also, so that you and I may learn the lesson of her life.

My mother then tenderly tells the children of certain faults in their grandmother's character which she saw signs of being inherited by these little grandchildren, and begs

them to combat the same. She ends her description with these words:—

But avoid the faults, just as you bind her virtues close to your hearts, and thank God every day you live for all that was good in her. All through her youth and middle life, she had a great many people to think and feel and work for, and I don't think she gave herself time for quiet reflection; she went too rapidly from one great duty and excitement to another. To be wholly a Christian, every soul must live somewhat alone with God, as well as mostly with his fellow-men. Dear heart! she has gone now where all her fine powers will be perfected, and I know she had a warm welcome, because she always loved her brother whom she *had* seen.

In thinking of dear Aunty Hall I always recall the Beatitudes, especially "Blessed are the meek, for *they* shall inherit the earth." When I recall my dear Mother, none of the Beatitudes come to my mind, but another verse fills all my spirit, "Your heart shall live forever." . . .

VEVEY, LA TOUR, *June* 22, 1867. SUSAN I. LESLEY TO HER BROTHER JOSEPH.

. . . Death seems to have cast a sanctifying veil over the last long sad years, and restored her to me as she was in middle life; the centre and sun of a large family, with a heart too large to stop with her own, but giving light and warmth to many others. I think we have to live till middle life, fully to appreciate those who have gone before us. Love them as we may, we have not in youth drunk of their cup, or been baptized with their baptism, and until we have, the understanding and the sympathy is not complete, nor do we fully take in their individuality. I am convinced that family ties grow stronger as we advance in years, that the love of parent and child, brother and sister, husband and wife, so far from being chilled by time, is only perfected late in life, when all the ardor of impatience is taken out of it, and the desire to see our ideals *realized*, gives place to a heartfelt satisfaction in the idea that governs the life, and which was far too high ever to be fully realized, under these earthly limitations. . . .

LA TOUR, NEAR VEVEY, *Aug.* 4, 1867. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . They [the Shannons] have long letters from Mr. Weiss, which they read to me. . . . They tell me a great deal that I do

not hear from any other source about the new Radical movement in Boston. I should like to talk it over with you, I can't think it would suit me at all. The minute people set themselves apart as the Progressives, they seem to me to form a sect more limited than any other. Peter and I both feel that we are too liberal to shut ourselves up in any such body, though we listen and are silent. No body of people seem to me really broad, who cannot take in the Past, as well as the Present and the Future, and who seem to think everybody in the dark who don't accept all their views. In their periodical, I read Mr. Johnson's articles and James Freeman Clarke's answers. Mr. Johnson always seems to me misty and dull, Mr. Clarke always clear and strong, and none the less liberal for having some definite views of his own. But I turn from the whole of them to a stray volume of Emerson's, which, next to the New Testament has been more of a stay and support to me this last year, and more of a help these thirty years past, than any other. In his Divine philosophy, I learn that "nothing lames or paralyzes us, but draws in, in some sort, the divinity to repay," and I leave the books, ready to build my Altar to the Beautiful Necessity, and lay thereon my sacrifice. I hear he has another work in the press called Philosophy for the people, so you and I will have a treat when it comes out. . . .

Oct. 10, 1867. SUSAN I. LESLEY TO HER BROTHER JOSEPH LYMAN.

. . . We have lovely people here in the house, refined, intelligent, and kind and attentive to all of us. Mr. Greville and his wife, English people of the very best sort, friends of John Bright's, he a member of the Reform Party, and with the largest and broadest views on all subjects. Peter has found him a charming companion for more than two months, and we grieve over their departure to-morrow. He belongs to the first Aristocracy, was for many years heir presumptive to the old Earldom of Warwick, which is now his Uncle's, and to whom an heir has been born very late in life. Yet he and his wife, with a large fortune and many estates, are the plainest and most simple people I ever saw. They take such an interest in our war. I often wish I had brought the Memorial Volumes with me, to give them some idea of our young men who have fallen. They have cordially invited us to visit them in London, and have been so extremely kind to L——, that she will never forget it. . . .

La Tour, *Nov.* 10, 1867. Susan I. Lesley to her Aunt Catherine Robbins.

. . . How strangely varied my life is, sometimes long periods of monotony and idleness, then shorter periods so full to overflowing of the most absorbing and exacting cares and interests, that I have scarcely time to rest! So it has always been with me, and I believe it always will be. I came to this beautiful spot early in June, and here I have been nearly six months with the exception of the one night I spent at Désor's, seldom going as far from the house as the mile's walk into Vevey. I came here worn out and exhausted with three months of physical misery and great mental anxiety in Paris, and the quiet beauty of the place, the glorious scenery of the Lake, the kind care of the Shannons, were all infinitely refreshing to my jaded nerves and spirits. I devoted myself to getting well, for Peter's sake, little thinking for how much else I was laying up strength, nor how I should need every atom I could acquire. . . .

My mother had accepted the care of a young relative who happened to be in Europe at this time, and who was very ill. Between the anxiety for my father and the constant care of this much-loved young friend, she had indeed need for "every atom" of her acquired strength. It was a heavier strain for three months than a much stronger person physically could have borne without breaking down; and only her steady and determined spirit carried her through this anxious period.

At this time came the delightful invitation from the Hales in Egypt, which solved for them the problem of the coming winter and gave them the happiest of prospects.

La Tour, *Nov.* 10, 1867. Mother to Aunt Catherine Robbins.

. . . On Friday came letters from Lucretia and Charles Hale begging us in the most cordial and generous manner to come to Alexandria, and be their guests. They have said and done everything to make it easy for us to accept, and after ten days of earnest thought and consideration, we have decided to go, leaving here the first of December. . . .

The months in Vevey, in spite of heavy anxieties and cares, had been full of charm. The place was exquisitely

beautiful, and the household most congenial. After leaving all this, my mother writes from Marseilles, November 28, 1867, to her aunt Catherine Robbins, these words:—

All the first nine months from the time of leaving home, I had been constantly disappointed in the people I was thrown among.—But it has been far more than made up to me in the last four months. Never was a more perfect society of lovely, congenial, wise, kind-hearted souls met together than at the beautiful *Pension* at La Tour. Some time when I feel better I will tell you about them, I dare not now. We were followed to the gate with tears and blessings. . . .

And now we go, to Lucretia, to the Nile, to the Pyramids! Farewell, beloved friend.

CHAPTER XXII

A Winter on the Nile

I will give only a few extracts from the letters from Alexandria and Cairo, but will add almost the whole of my mother's journal of their four weeks' journey up the Nile. It was a rare pleasure thus to spend three months with old friends and among such beautiful scenes. It was a never-to-be-forgotten holiday time, one often referred to, and lived over in memory in later years. This trip was then an unusual experience for Americans, which has now become one of the commonplaces of travel.

Alexandria, *Dec.* 10, 1867. Susan I. Lesley to her brother Joseph Lyman.

. . . I was quite ill when I left La Tour, and continued so till yesterday, when I began to feel rested and better than for some weeks. On board the steamer, Peter made the acquaintance of Mr. Mariette Bey, whose works on Egypt he had very carefully studied, and also the acquaintance of Rolfe, the African traveller, whose nine years in the heart of Africa made his conversation of the greatest interest. He has been employed by the Royal Geographical Society all this time, and was supposed by them to be lost for more than two years that he was not heard from. . . .

We found here an old Janissary named Ramadan, a charming old Patriarch, two Arab servants in wonderful costumes, Ali and Suleyman, and an Italian girl named Fanny, who kissed my hands, and with profound obeisance conducted me to my room, and has taken the best of care of me ever since. The parlor looks precisely like their [the Hales'] old parlor at Hamilton Place, and tired and weak as I was I could not restrain my tears, when two lifelike portraits of dear Mrs. Hale and poor William Thayer * looked down at me as I lay on the sofa. I have been out but once, then visited William's grave, and gathered a spray of Arbor

* William Thayer died in 1864.

Vitæ for his mother. Peter has wandered about filling his note books with strange sights and inscriptions, and wondering and pleased at all he sees. From the window, it appears to me the Rag-fair of the Universe. To-morrow we go to Cairo, and next day up the Nile to be gone a month.

ALEXANDRIA, *Dec.* 6, 1867. PETER LESLEY TO HIS DAUGHTERS.

. . . My beloved children, I must begin now to write to you a little every day. You have been always on my mind, always in my heart, always dearly beloved, but I have been obliged to let your Mother do all the writing. But now I am so much better, and this warm summer weather gives me such new life, that I think I can tell you myself some of the strange things that we are seeing.

We left our quiet home on the Lake of Geneva last Tuesday week. . . . [At Marseilles] all sorts of strange creatures came on board. . . . One group was particularly curious. It consisted of four long-robed, shovel-hatted priests, dressed quite in black, chatting with three or four sweet-looking nuns, dressed also in black. These kept going and coming between the shore and the forward part of the ship. The Captain and many gentlemen paid the whole party great consideration and politeness. After a while began to join them a troop of eight or nine negro girls, dressed all alike, in red and white turbans and Turkish or Arab clothes. They were as black as jet and entirely different from any kind of negroes you see in Philadelphia. I took your Mother forward to talk to them, and to one of the lovely nuns. She told us that they were part of a black girls' school established at Verona in Northern Italy, and were now returning to Cairo, after a four years' course of instruction in French, Italian, sewing, embroidery, history, geography and arithmetic, and the Christian religion,—which meant of course the Catholic and Romish rites and creed.

. . . I afterwards got acquainted with a fine-looking Greek or Italian, who was very much in company with the four priests, and who gave me his card, with the name Daniele Camboni, Missionaire Apostolique de l'Afrique Centrale. He told me that he had two or three "establishments" on the Nile; the principal one at Khartum, where he had entertained all the great East African travellers, Speke, Grant, Baker, etc., at different times, and that he had made four journeys into Central Africa. . . .

There was on board by a happy chance one of these great

adventurers,—a man of quiet, gentle mien, but a clear eye and determined aspect, rather small and slight of build, poorly dressed, but a perfect gentleman. In the last days of the voyage he assumed a red shirt, a Kossuth hat, and sat at the far end of the cabin dining-table. . . . His name was Rolfe. His native place was Bremen; he called himself a Prussian, and spoke of incidents in his recent interviews with the King of Prussia and Count Bismarck, as well as with Sir R. Murchison and others of my acquaintances in London. He had been in all *nine* years in Africa. . . . Now he is on his way to join the new British Expedition to Abyssinia, at Massowah on the Red Sea. We had many walks and talks together on the deck. . . . [Much about the black races in Egypt and in Africa.] I asked him if he thought it possible to make anything out of Africa and the negro races. "Certainly," he replied. He seemed to consider them quite equal to the white races, and gave me many instances of intelligence and cultivation among them, black men of noble character, of learning, and of force. I could not understand him. But since my arrival in Egypt I begin to see what he means. I am amazed to see how *black* all these people are—how generally black they are; and then again how intensely black some of them—many of them are. But the faces, features, manners, figures, are all of a different type from any I am accustomed to in the United States. . . .

CAIRO, *Dec.* 15, 1867. PETER LESLEY TO HIS CHILDREN.

[After a fine detailed account of the city and its surroundings:] . . . It has been the custom in Egypt for thousands of years to destroy the older buildings, to obtain materials for newer ones. The Greeks, Romans, Turks, and Arabs have all done so. The great Pyramid has been a quarry for Cairo, just as the Coliseum has been a quarry for Rome.

Some of the Mosques of Cairo have splendid porches, which you meet unexpectedly as you thread the narrow and crooked streets. I will show you pictures of them when I return home; for they cannot be described. But the artist can discover everywhere in Cairo the original patterns of many of the most characteristic parts of the Gothic Architecture in Western Europe. In fact, it is easy to explain why the Gothic Architecture suddenly sprang up all over the West in the twelfth and thirteenth centuries, when we remember that just before that age the Crusades had sent hundreds of thousands of priests, poets, artists, architects, and noblemen into Egypt and Syria, to learn many new arts, and

see many splendid things, which they imitated and improved upon when they returned to their Western homes.

The pointed arch, for instance. People have said that it was accidentally discovered when the Normans doubled their arcades of round arches. But here in Cairo there is an old mosque—the oldest of all—Jama Teilûn—which was built in 873 A.D., more than a century before William the Norman, Conqueror of England, and more than two centuries before the oldest *pointed* arches of Europe,—and has pointed arches (a *little* horseshoed at their springing *ends*) everywhere.

Another smaller mosque, built 1100 A.D., also has pointed arches.

Then I see many gateways in the streets—old stone gateways—beautifully sculptured, and oftentimes with Norman tracery. Then I notice that many of the corners of buildings have their edges chamfered off and cut into columns—or have charming little Norman columns let into the sides of the windows. . . .

A letter to his littlest daughter from Alexandria, February 2, tells of the visit of my mother and the Misses Hale to the mother of the Viceroy, and of a call on M. Hakakyan Bey "just before the arrival of the marriage procession of his daughter to the son of Linent Bey," and a description of that auspicious occasion. Indeed, all his letters to the children are full of interest. They were often delightfully illustrated, full of clear descriptions, and careful answers to any questions the young people had sent him.

In a letter to his dear friend Mrs. Hillard, of Boston, my father gives a delightful account of the Nile journey, concluding with the following remarks on the population of Egypt at that date and under Turkish rule:—

CAIRO, *Jan.* 21, 1868. PETER LESLEY TO MRS. SUSAN HILLARD.

. . . At various chief towns on our route, we were received with all the honors due to the general representative of America in Egypt, by the Consular agents. Great dinners in great houses were made for us, ending with fantasias of music and dancing, which lasted until two o'clock at night; but I took the ladies home always at eleven or twelve o'clock, and we found that quite enough; for however gentle and civilized in their manners these people of rank and wealth may be, the amusements of the country

are simply and entirely barbarous, worthy of the heart of Africa. Egypt—our southern brethren are right about it after all—Egypt is a country of negroes and negritos. Shemites and Japhetites colonized its seacoast at various times; but the black Berberine race are evidently at home in it, and an ever-flowing river of Nubian, Abyssinian, Darfour blood, blacker than *our* black blood, has poured from the beginning and still pours in unabated volume down the valley from Khartum to Alexandria. The British Consul, Read, disguised as a Mogreb Arab, last summer, found 3,000 jet black and other slaves for sale *at one time*, in 30 or 40 slave pens. The blacks of the Upper Valley are so black that there is not even a speck of white in their eyeballs. They have no "white of the eye" at all. Their skin is not glossy, and reflects no points of light. They stood against the walls, at our dinners, holding goolahs, and you could not discern a single feature in the face; the head was a mere black disc against the wall. But the Egyptian Monument builders were of a brilliant burnished copper-red color—and so are their descendants in many of the villages.

The fact is simply this: the present population of Egypt consists of a few Franks from every country of Europe, a few dark and light Turks, and several millions of negroes, mulattoes, red men and jet blacks. In the desert are scattered about the tents of the free (gun-carrying) black Arabs or Bedawin, of various names, according to their clans or tribes.

You see therefore in Egypt the successful existence of a civilized black race. And I am sure that if the domination of the Turks could be removed—and if they could for a little while be protected from the first immediate consequences of its removal, namely, the incursions of the desert tribes—this civilization would organize itself and assume an aspect of dignity, virtue and prosperity, such as would satisfy a philosopher and philanthropist. As it is—the Turks are protected by the Franks, who suck the life blood of the country through the Turks. The cotton speculation has ruined all the petty landholders. The riahs or native subjects are in misery again with inflated notions of social luxury —and things are going from bad to worse, [so] that thousands of Fellahin are flying into the desert and taking up their residence in the Bedawin tents. The government has assumed all debts, and gives the debtors seven years to pay in. But the debtor can no longer borrow money to work his land, and has no hope of paying his debt. The Viceroy already owns one-half of all the arable land in Egypt. In four or five years he will own two-thirds.

Bankers and Beys will own the rest, and the whole population will consist of slaves.

Lady [Duff] Gordon told me, that where from her window she saw thirty threshing floors at work three years ago, she now can count but four or five. And, what is even more significant of the misery of the people, the number of dogs has diminished in the same proportion.

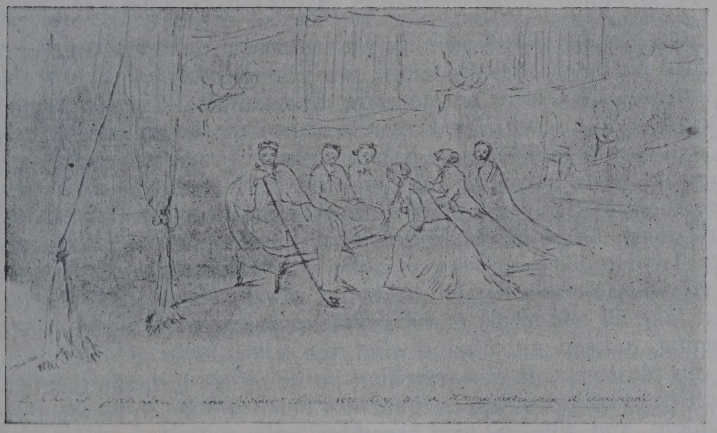
All this is very sad. But when the traveller's curiosity and taste and science and learning—whichever it may be—is satisfied, he always finds enough of these sad facts to make him doubt of progress in the world,—be he in Egypt, or in Spain, or Italy, or France, or England, or where you will—except in the United States. There, the beast of burden is in a well-stuffed stall. There, man has standing room. And until our land gets its overdose of humanity, like other lands—it will be the exceptional paradise. After that—the universal laws must do their eternal work. Were there but one pair of human beings, the regular increase of population would suffice to place 1,000,000,000 on the earth in 450 years. Of course our own country will be overfull in less than half that time. But who knows the end from the beginning—excepting the Good God?

It is a strange feeling—this wonderment at ruins so gigantic, and so old. The temples are far finer objects than I supposed. And yet, when one compares them with the grandest edifices of modern days, they are not so grand. The arches of the baths of Caracalla impress me far more than the lintels of Karnak. The piers of St. Peter, Milan, or Bourges, are superber works of art and skill than the columns of Luxor. I confess it, I admire the shafts and capitals of Denderah and Esne more than I do the best Corinthian columns I have as yet seen,—but not so much as many combinations of Gothic forms. Still, there would be a beauty and majesty in one of these great temples, if restored, so peculiar to itself that it could suffer nothing by comparison with the greatest monuments of modern art. At the same time I can say that this visit to Europe has converted me to the side of those who regard modern art as superior both in genius and execution to the ancient.

These three pictures by Miss Susan Hale evidently represent a visit which the three ladies of the party made to the Viceroy's palace while in Cairo:—

The Vice Roy's Palace, "Kasr-el-Alí."
Sister Lesley, as a member of the family of the Consul General, is escorted up the Grand stair-way by female slaves.

1. Sister Lesley, as a member of the family of the Consul General, is escorted up the Grand stairway by Female Slaves



2. She is presented to the Mother of the Viceroy as a *femme distinguée d'Amérique*

3. She is entertained by Dancing Girls, while smoking her pipe

(Susan Inches Lesley's Nile Journal.)

To her Daughters and her Friend Margaret E. White.

On Board the Nile Steamer belonging to the Viceroy,
Dec. 22, 1867, *Sunday* A.M.

On Monday last, December 16th, Lucretia, Susie and I accompanied by Peter, went on board our little steamer, at three in the afternoon. We were not to start till next day, Charles having been obliged to go to Alexandria to attend the Viceroy's ball; but it is always thought best to pass a night on board before leaving, so as to see if anything may be wanted. I wish I could draw like Susie, to give you an idea of our boat and comfortable accommodations, but I can't. Peter and I have the ladies' cabin for our sleeping place, and it is also the assembling place of our little party when the deck is too cold; but we all mostly live on deck, and take all our meals there, and there being both top and side awnings to keep out sun and wind, the sailors raise or lower them at our pleasure. It was very kind in the others to make this disposition of our quarters, as it enables Peter and me to be together at night, and gives us nice breathing space. Besides Peter and myself, there are two other guests in our party, Mr. TaWheel, a young Arab gentleman attached to the consulate, and Mr. Van Lennep, a young Dutchman, belonging to the Dutch Consulate.

These young men both speak English perfectly and are great additions to our party, especially Van Lennep, who is a simple-hearted and intelligent fellow, with an excellent disposition. . . . They did not however start with us from Cairo.

Susie and Lucretia and I all sat round the table, Lucretia and Peter playing Piquet, and I making a large shoe-bag, to hang beside my berth. Susie draws a great deal in the prettiest way. Tuesday, 17th, we passed our morning finishing our arrangements for living a month on board the boat. We got a telegram from Mr. Hale, saying he would be with us at two, and ready to start, and the girls and I had a great deal of fun about its falling to us to order the fires lighted to heat up the steam boiler, etc.—At two he appeared, accompanied by the faithful Hassan, a charming Arab who was also in William Thayer's service, and who is very devoted. At three we steamed off, and at the same time sat down to our excellent lunch on deck. What a meal it was! We were all constantly hopping up and calling to each other to run and see some wonderful building, or fine gardens, or curious object, or picturesque group on shore, as we swiftly steamed past. Then Charles opened his green bag, and displayed the last French mail he had brought with him, with letters for all of us, and innumerable newspapers, and between eating our meal, for which we were very hungry, and seeing the sights, and reading our letters, we had our match. At last we abandoned the mail altogether, and devoted ourselves to the beautiful shores. Just before sunset we came upon a Dahabiyeh, containing Mr. James Lawrence and his family from Boston, who had left Cairo five days before, and owing to contrary winds, had never got out of sight of the city. Hassan at once fired a salute, they hoisted the American flag, and Charles and Susie with Hassan immediately lowered a little boat, and went to visit them. At this spot we decided to stop for the night. In a half-hour the little boat returned, bringing also Mrs. Lawrence and her sister, Miss Motley, to dine with us. We had an elegant dinner on deck, Champagne, etc., and *bonmots* flew round. . . . At 8 P.M. the ladies were rowed back to their Dahabiyeh, and we settled down to our letters.

Wednesday, 18th: We rose to a most lovely morning, and started off again a little before sunrise, as we always do. How can I describe to you the scene that meets our view when we go on deck; a glorious sky, the finest, balmiest of airs, on either side the Nile, the banks covered with sights so unlike anything we ever saw before! A grove of palms, a group of women, filling their antique-looking water jugs, and poising them gracefully

on the head, a troop of half-naked children, and here and there a turbaned Arab with loose white robe, bowing down three times successively in the dust, his face towards Mecca, which shows he is praying. Then we take our coffee, each one as he appears. Our regular breakfast is at eleven, when we have all sorts of good things. We dine at five, a grand repast, and about eight we have each a cup of tea handed us. This morning at about ten o'clock, we came up with the Dahabiyeh of the Wm. Tuckers, which was eight days from Cairo. This will give you some idea of the speed of a Dahabiyeh, without favoring winds. We stopped our steamer and they put out a little boat, and all came on board, —the Tuckers, Arthur Lawrence and young Howe, Aunt Eleanor Barnard's nephew. There was great enthusiasm at meeting. Susan Tucker was very hearty, she said to me "well, your eyes haven't gone out of your head anyway." We gave them Champagne, and all of us talked as fast as we could for a half-hour, when we parted with mutual hopes of meeting on our return. The Tuckers enjoy the slow life, and don't mind the inconveniences; they go ashore, and take long walks, when there is no wind to sail the vessel, and are as jolly as can be. Well, we steamed on to Benisuef, which we reached at about three, and there we stopped to take in coal. There a strange scene occurred. There is a Consular agent here, an Arab, and a Christian, who had received a telegram that the American Consul General was coming. So he appeared in great state with five or six Arab dignitaries, and they all salaamed us, and sat down on deck to talk with Mr. Hale, Hassan being interpreter. The Consular Agent invited our party to his house, and they all went but me, and were gone about two hours.—In their absence I sat on deck and enjoyed seeing the strange sights on the shore, all but the sad-looking blind beggars, who sing a melancholy refrain by the hour, and the little naked children particularly repeat it in chorus at the close of each verse. It means merely, "I am sick, I am cold, I am naked, I am hungry, give me baksheesh, for the love of Allah." Then can you imagine a steamer loaded with coal by a troop of small girls, about the size that Meggie was when I left home [nine years], and some smaller? You see them fill the large baskets, which you wonder how they can stagger under, poise them on the head, and come winding down the bank to the boat in single file, come on the boat and empty their load down into the bins, just as seriously as if their lives depended on it. As I sat watching them, Mr. TaWheel appeared by the train from Cairo, and soon after our party arrived from the Arab's house.

where they had been entertained with cold sherbet, and had a very amusing time. Peter had found a great deal that was curious in the town itself, and Susie had drawn the entrance of Mazzalla Lucca's house and presented it to him, at which he was much delighted.—Pretty soon Mazzalla Lucca himself appeared, with his servants behind him bearing presents for the Consul General, a live sheep, a turkey, some fresh butter, etc. We invited him to dine with us and proceed to some alabaster quarries, a few miles farther on, which Peter wanted to see—so he did after directing a horse to be sent to him at the quarries.—But we were long in getting there, no horses appeared, and the good Mazzalla passed the night on board.

Thursday, Dec. 19th: At Sunrise Peter and Susie with Hassan and our Arab visitor put off for the alabaster quarries and returned soon, having seen all they wanted. We soon steamed on, and landed Mazzalla at the next railway station.—Susie then proceeded to make a quantity of pen-and-ink illustrations of our landing at Benisuef and the visit of Mazzalla, just as funny as they could be.—Lucretia also commenced the first chapter of a work she calls the "Novel of the Nile," * in which each of the party is expected to write a chapter.—*My* chapter will be exceeding short. At *déjeuner*, at eleven, she read her chapter, which was greeted with rounds of applause. In the afternoon we came up with the Dahabiyeh of the Rodmans, Mr. and Mrs. Sam Rodman and their daughter (Mrs. Rodman was a Miss Motley), so we saluted, and sent a boat, and they came on board. As they had a fine wind, we invited them to go on in our steamer to the next place and dine with us, and let their boat take them up, which they did. This was a pleasant occasion. Mrs. Rodman was full of enthusiasm about life on the Nile, and Mr. Rodman enjoys going ashore, and shooting birds of various kinds which he preserves beautifully. After dinner they insisted on hearing the novel. Peter had written the second chapter, so Susie read aloud the two chapters. Their boat arrived about eight o'clock P.M. and we parted for the night, they agreeing to come on board and take coffee in the morning, and go with our party

* The "Novel of the Nile" was an impromptu round-robin, begun by Miss Lucretia Hale, and continued in succeeding chapters by her *compagnons de voyage*. The chapters were read daily at lunch-time, and the adventures of Imogene Ratisbone, the fair heroine, and her adorer, Robert Robertson (who became in a later chapter Bob Bobson, much to the mystification of the foreign members of the party) gave much amusement, and served in later years as a pleasant reminder of their own voyage.

to see a curious and very ancient temple, and a Coptic convent, on the opposite shore.

Next morning, Friday, the 20th, the Rodmans and all our party except myself went on shore, and it was very amusing to me to watch them all mounting their donkeys, and to see them accompanied by the Sheik of the village and a very various retinue. They were gone about two hours, and had a most splendid time. As I am getting over my neuralgia, I did not go, because I want to visit the tombs of Beni Hassan to-morrow, and knew that I could not do both. They went to the Convent, and at the temple Peter saw an ancient cartouche which he partly copied. He said he could have spent six hours in this spot only three feet square, deciphering these hieroglyphics.—The Rodmans took breakfast with us, and then returned to their Dahabiyeh, expressing great delight at their visit. I suppose we are not likely to meet again, till we come down the river. So we steamed on to Minieh.—Oh, if you could breathe this loveliest of pure air all the day long, and could see these splendid sunsets, such skies as were never painted. I did not mention that yesterday Mr. Van Lennep joined us, and is a fine addition to us. He saw our boat stop for the night while he was going along to Minieh in the train, so he made them let him out and ran to us, a masterly feat. He reached us just as were sitting down to dinner with the Rodmans, and great was the excitement, as we had feared he might not come. At Minieh there was nothing of interest to see. But Susie and I watched the little girls coaling our vessel. There were a whole troop of dark little Megs, say fifteen who spent three hours at their serious work.—Susie and I took a lot of little copper coins, half-piastres I believe, and distributed two apiece to all the group. At first they could hardly believe their eyes,—but when they took it in, they scampered about in great joy and their sober little faces were lighted up for the first time.

Saturday, Dec. 21st: Forefathers' day. We rose early, our steamer having started at daybreak, and we had dressed and got our coffee, before we reached Beni Hassan.—We then took donkeys, and went to the temple of Diana about two miles off.—A donkey boy goes beside each of us, and the whole village, Sheik and all, turn out to accompany us. Going through the grove of palms, and afterwards on the desert, Lucretia and I accost one another as the donkeys pass, and wonder if it be really us, and laugh as if we should go off the handle, at the strangeness of the whole scene. The villagers have on every variety of rag-bag. The children do not need to be unclothed,

but rather clothed upon, and every now and then an Arab shows his feats of horsemanship, by careering across the desert in every variety of evolution. I say to Susie, "If it be I, as I believe it be, I've two little girls at home, and they'll know me." We reach the temple, Peter goes at the Cartouches and with Van Lennep at his side, they find no end of interesting things to decipher. But we return to the boat to our eleven o'clock breakfast, as the Tombs of Beni Hassan will need all our strength.

1st Shot— For Mary Lesley
"I would rather have a donkey."
(Miss Lesley, madly conversing in English with her Arab Donkey boy, who don't understand a word.)

A half-hour afterwards we again start on our donkeys and horses, when Mr. Hale calls the Sheik and requests that the whole village shall not accompany us to the Tombs,—for however picturesque and amusing, it is far from convenient to have this retinue under our heels. Well! I think you would have laughed if you could have seen the Sheik take a whip and scatter all the small fry.—So we went on to the tombs, with only about five-and-twenty solemn Arabs, in addition to the Donkey boys. I had very imprudently in the morning taught my boy to say "Good little Donkey," and he was so charmed at having acquired these English words that he did nothing but say "Could littel dunkey" the whole

time. There are a long line of cliffs on the brow of a very high sand bank, and in these cliffs overlooking the valley of the Nile are excavated the tombs of Beni Hassan. They are large chambers, some of them with vaulted ceilings and supported by real Doric columns. And yet these tombs are six thousand years old. Peter went into one and said, "Behold the origin of the Doric column," Susie Hale, coming out of the next, said, "But this is Doric-er, Mr. Lesley," "And this," said Lucretia, coming out of still another, " is Doric-est." We then went through the whole, stopping to see the cartouches in each one, and to hear Peter discourse on their meaning. It is so good that at last he is able to see with his own eyes these antiquities that he has studied with such interest. What a day it was altogether, one that we can never forget! But to tell the half of what we saw is quite impossible. As our donkey boys had been much more affectionate than we liked, during the ascent of the precipitous cliffs, we preferred walking to the foot when we again took the donkeys, and reached our boat in time for dinner before sunset. As we steamed away, the whole village of Beni Hassan were shouting after us. We reached Rhoda before dark and moored there for the night. At dinner we drank to our forefathers, Van Lennep calling them his Foregrandfathers, because they went from Delfthaven; and altogether we were very jolly, although as tired as dogs. In the evening, we lay round on the divans and rested.

Sunday, 22nd Dec. We had contracted a few fleas from the affectionate donkey boys, and had not slept quite so well as usual; so we were late up and Peter regretted missing some points on the river. However, from ten to twelve we were passing some of the most magnificent cliffs, the Palisades on the Hudson being nothing to them; and in their steep sides were excavated the wonderful little homes of the Anchorites, and here and there a beautiful grotto or a strange cartouche on the face of the rock. Peter gave us various little geological lectures, interspersed with here and there some antiquarian lore, and the morning passed away only too rapidly, and we were sorry to bid our cliffs, Good Bye. Susie and Lucretia brighten everything by their quick perception, their versatile sympathies and ready wit. I am sure, Margaret, if this letter is worth less in other respects, the picture at the beginning by Susie, and a perfect representation of your friend will make it valuable. And now we approach Assyoot, where the little Arab girls will again supply us with coal, and where we pass the night. It is almost dinner-time and I can write no more.

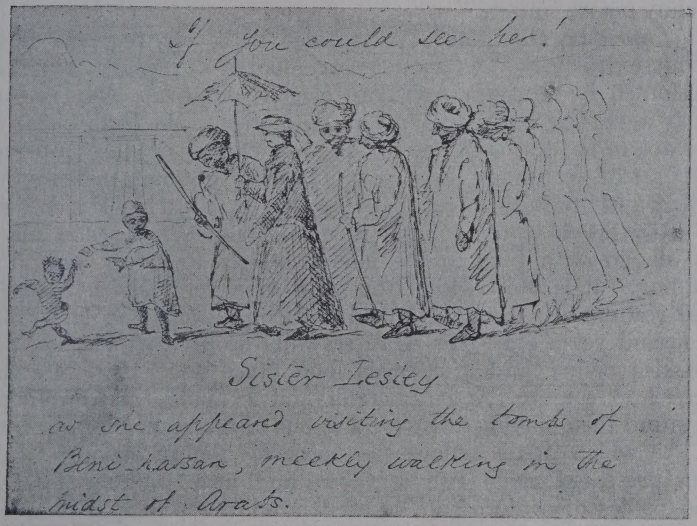
Monday morning: I stopped as we were approaching Assyoot yesterday, little dreaming of the scene that awaited us there. On the bank above us stood, in every variety of rich and picturesque costume, ten of the wealthy Arabs of the city, with about twenty of the handsomest donkeys, splendidly caparisoned, with crimson velvet saddles, etc. Soon one of them came on board with two boys of twelve and fourteen, very elegantly dressed in sacks of yellow broadcloth and Turkish full trousers of the same, and the boys both spoke English perfectly. They were the best-behaved boys I almost ever saw. They announced to us that they were the sons of the American Consular Agent of the city of Assyoot, that their father was now absent from home, but that the gentleman with them was the agent for Spain, and the intimate friend of their father, and that he was going to do the honors of the city in their father's absence. He and the boys also were Copts. He then invited us, through them, to dine with him, and said he had brought the donkeys for the purpose. So we mounted in great state and rode to the city, about two miles, through the sweetest lanes and paths, the fresh verdure and spicy breezes of spring enchanting us all the way. The city itself was most curious, and to my eye, much more interesting than Cairo, so much cleaner, the people so much happier-looking. Oh, such windings, in and out, in the narrow and high-walled streets! How impossible to describe such a city to any one at home, so entirely unlike anything in Europe or America! We were taken first to the house of *our* Agent, where the boys ordered coffee, and brought their little sister to see us,—a dear little girl of ten years, dressed in rich brocade, with the funniest little turban and veil on. She, too, was a perfect little lady, and salaamed us all, going round and kissing all our hands, and lowering her splendid almond-shaped eyes, at every glance. Then we mounted again, and went to the house of our host, the boys also being invited. There we were seated on divans in a very splendid apartment, and soon two Arab merchants, and the American missionary, Mr. Hogg, were invited to meet us. How can I tell you of the dinner, consisting of nineteen courses and the oddest dishes? First, a chicken soup, then a whole sheep, head, trotters and all appeared; and after every solid dish, a dessert between.—Our host himself, girded with a towel, waited on us, as that is considered the height of Eastern hospitality; but we had four Arab servants to assist. Peter got lots of information from the missionary, and Lucretia and Susie and I could only give each other glances of wonder and amaze. The boys had a group of little friends about

them, three of the handsomest Coptic boys I ever saw. They all learn to speak English at the Coptic school, for future mercantile purposes, and are very intelligent. Peter had a deal of talk with them. But after dinner a new surprise awaited us. We were sitting on our divans, and our host had brought his baby, a dear little soul of two years, and had seated her in my lap, when the little thing salaamed us all round, and then sat like a good little kitten all the rest of the time. When, lo! three dancing girls, two of them as beautiful as Houris appeared on the scene, and just as soon as Mr. Hogg, the missionary, had disappeared, they began their curious performance, to the strange but sweet music of three Arabs who were squatting in a corner, with their musical instruments. These girls were wonderfully dressed. One had a nose ring, and all had no end of brilliant colors, and tinsel hangings. Their motions it is impossible to describe. Susie Hale can do it, but it is like no dancing you ever saw. We felt as if we had been transported into some other world, and were seeing a regular Dervish dance. At half-past nine, we mounted our donkeys, our host and all his retinue going with us, and Arabs with lanterns before and behind us. At the boat they took leave of us with great state, our host saying he had presents preparing for Lucretia, Susie and myself, which would be ready on our return down the Nile. Peter, the girls and I, were glad to go straight to bed after our exciting evening; but Mr. Hale and the two young men returned on their donkeys with our host to his house where they remained till three o'clock to see the dancing, which I imagine was of a less proper character, after our departure. Oh! what a strange time it was altogether! To-day and to-morrow we are quietly steaming along, glad to think it all over, and to have nowhere else to stop till we reach Denderah.

Monday, Dec. 23rd; We left Assyoot early in the morning, and steamed on to Suhag, where we took in coal and stopped for the night. As there was not as much as usual to see, we went down into the cabin. Lucretia and Susie read and wrote. We had no end of talk about our visit to Assyoot, and we all wrote a good deal. Our novel gets on apace, and is very amusing to us. Mr. Van Lennep and Mr. TaWheel have both written good chapters, and your father also. It is great trash, but it serves to interest us for all that. The last writer always contrives to work up new intricacies in the plot, which the next has some trouble to unravel, and the scenery and incidents of our Nile voyage fill up between. When my turn comes, I write a letter from the heroine to her intimate friend, and the next time Morgiana answers. Van Len-

nep and Susie Hale write the best chapters. We have one read every day at lunch.

Tuesday, 24th: We steamed on all day to Denderah, and Lucretia, Susie and I were very busy preparing presents for the young men's Christmas stockings, out of the very small resources we had on board. Susie made funny little drawings, illustrative of some of their adventures, and Lucretia and I worked pin cushions and other trifling conveniences. I thought of my little girls all day, and wished I could see their Christmas stockings and put something in.



Wednesday, 25th: We rose early, and when we went on deck for our coffee, found the young men in a great frolic over their drawings and presents. They had drawn some new ones for Cousin Susie. We all wished a Merry Christmas, rejoiced in the beauty of the morning, and soon took to our donkeys to go to the temple of Denderah. The little picture at the head of this sheet represents what Susie Hale says she saw and heard at starting. How can I describe that ride through the sands, and over the excavated tombs and open graves,—beautiful groups of palms here and there, and the many columns of the temple in the distance? And when we arrived, we found the temple beyond all our expectations. The columns so beautiful, all the capitals differ-

ent, and the walls with their bas-reliefs and pictures and cartouches all in fine preservation. Your father reads the hieroglyphics, and would like to spend days instead of hours in deciphering them. But perhaps it is as well that he cannot. We mounted a winding staircase to a portion of the roof still remaining, from which we had a splendid view of the country for miles around. Then Hassan spread shawls, and brought the lunch basket, and at high noon on the top of Denderah we ate our Christmas lunch, and drank champagne to the healths of all our dear ones at home. The air was soft and balmy as midsummer and our day was delightful. We returned to our steamer at four and steamed on to Kenny before sunset.

Thursday, Dec. 26th: We steamed to Luxor, reaching there about ten o'clock. As soon as we moored our vessel, we were welcomed by Mustafa Agha, an elegant old Arab, who is consular agent for both England and America. He is as black as the ace of spades, with one of the most perfect profiles, and regular set of features I ever saw. Indeed, nothing strikes your father and me both so much as the fact that the black men here so little resemble the colored race in America. Mustafa made us all go with him to his house, which was very near the landing. It is built within the ruins of a very ancient temple, and you enter it through the old portico, between two and three thousand years old. His Arab servants brought us sherbet and Turkish coffee, and afterwards long pipes which we were expected to smoke. Aunt Lucretia and I made believe smoke, now and then looking at each other out of the corners of our eyes to see which made believe the hardest. Before leaving, Mustafa presented each with scarabæi, and little mummy figures, and copies of some of the bas-reliefs on the principal temples, very beautifully done by a young Englishman, who stayed at his house and died there. We invited Mustafa to dine with us, and were delighted with the elegant old man and his stories. He speaks English very perfectly.

Friday, Dec. 27th: Our party all started early for a long day at the Tombs of the Kings. But much as I longed to go, I have decided that I must leave the most fatiguing excursions and very long donkey rides out of my list. So I remained alone in the boat, and wrote up my journal, and a long letter to dear L. It was a very resting day to me, so perfectly quiet, and I felt perfectly refreshed for the next day's work, before night. They all came home in great enthusiasm, but very weary, and thought I had done well to rest.

Saturday, Dec. 28th: We breakfasted, and started early for Medinet Aboo, Mustafa providing us all with splendid donkeys, and himself accompanying us. The ruins were very fine, and within were the ruins of a Christian temple, the columns carefully concealing the old bas-reliefs of gods and kings of an earlier date. One cannot wonder that the early Christians should have wished to obliterate all traces of heathen worship, when they brought in their more simple and spiritual religion. Yet how natural that there should have been a reaction from that simplicity three hundred years later, and the Catholic Church with its pictures and statues, its saints and angels should have borne such a striking resemblance to the old worship! After leaving Medinet Aboo, we rode home by the Memnonian Colossi, sitting before them on our donkeys in the most splendid sunset light. I think I love these grand things better than anything I have seen in Egypt. There they sit, with their hands upon their knees, in the most sublime repose, and there they have sat for hundreds of years. They are sixty feet high above their pedestals. I find I have forgotten to tell you in the proper place, that on Thursday, after our visit to Mustafa, we visited the temple of Kourneh and the Ramesseum, but I cannot tell you more of them. Your father studies each one, and has filled large note books with cartouches and observations, but I can only admire them in a general way, without describing.

Sunday, Dec. 29th: Susie Hale was so much worn out with all she had done, that she remained below all day, and I stayed with her. We had found the Dahabiyeh of a Mr. F——, an American, alongside, and Mr. Hale invited them to lunch. They hate the Nile, wonder what any one comes for, etc., etc. We found they had never been ashore since leaving Cairo, or seen a single thing, so invited them to join us the next day at Karnak. Our whole party rested to-day.

Monday, 30th: We all started early for the temple of Karnak, one of the most perfect of days. I am getting quite fond of donkey riding, as I always have an easy pacer and excellent saddle. As for the Temple, it quite surpasses my powers to describe. . . . Such a forest of columns, I have seen nowhere. —And in one part, where the roof is quite gone, the effect of the blue sky above all these heights is wonderfully fine. We wandered round through hall after hall, the walls and ceiling all covered over with cartouches and hieroglyphics, and the conquests of the early kings; Peter telling us the history of each group as we stopped before it. We have become about as famil-

iar with Rameses and Thothmes the last fortnight as we ever were with Washington and Benjamin Franklin. Your Father and Mr. Van Lennep say I utterly scorn to look at anything as late as the Ptolemies and Cleopatra,—they are much too modern for me. On the side wall of one end of the temple, the capture of some of the Kings of Judah is represented in magnificent bas-relief, and among these Jewish heads, all so different from those of their Egyptian captors, was one that might have been taken for your Uncle Joseph Lyman, so perfect was the likeness. We were tired enough by noon, and glad to go into the inner recess of the temple, and sit down to our lunch, under the shadow of the massive columns. But what a surprise awaited us! Hassan had brought the lunch basket, and was proceeding to distribute cold chicken and ham and pale ale, when at a sound from Mustafa, four Arab servants entered, bearing an immense silver tray, covered over mysteriously. They lowered the tray to the ground, lifted the gay cover, and lo! a whole roast sheep, and a large turkey, met our wondering gaze, surrounded by delicious cakes made from the Durah. All these things were hot from the oven. Van Lennep and TaWheel quickly carved, and a nicer meal was never enjoyed. We drank Mustafa's health in Champagne, and he seemed to enjoy our pleasure. When we had dined, he asked us to go to another recess, where he said the Prince of Wales had the English service read, when he was here. And there, we found, he had made his servants spread large Turkish rugs upon the ground, and heavy cushions where we were to sit, while they handed us the most delicious Turkish coffee. Here I learned, that it was here at Karnak, on the roof overlooking this strange country, that the elder John Lowell made the codicil to his will, in which he left the fund establishing the Lowell lectures. It seemed to me I could go back and imagine some of his thoughts, as he stood among these ruins and the relics of that old time. He felt, no doubt, a desire to leave behind him something as different from these old grandeurs as modern Christian civilization is different from the old. As we sat sipping our coffee, the F——s arrived.

Tuesday, Dec. 31st: We steamed away from Luxor early in the morning, and reached Esneh at noon. They all went to see the ruins of a temple there, except Lucretia and me, who were tired from yesterday, and remained by ourselves, having a lovely quiet talk. In the afternoon, we steamed on about twenty miles farther, and stopped for the night near a lovely bank crowned with palm-trees. I sewed all day. At sunset

Hassan descried the Dahabiyeh of Lady Duff Gordon, moored just above.

Wednesday, Jan. 1, 1868: We rose to shouts of Happy New Year, and going on deck found packages of presents from TaWheel for all of us, little curiosities from the tombs, and what your Father valued most, a fine collection of brown paper impressions ["squeezes"] taken from the bas-reliefs of the kings. Mr. Hale sent a message to Lady Duff Gordon, who answered that she would lunch with us, and as soon as we had our coffee we started off on donkeys for the temple of Edfoo. This temple was only a mile and a half from the landing, and was much the shortest of our excursions. The building is in a much better state of preservation than any we have seen, and is very fine indeed, the columns and the court magnificent. It is, however, very modern, being only three hundred years before Christ. When we returned to our steamer, Lady Duff Gordon joined us at lunch. She is a tall and fine-looking woman about fifty-five, and has a distinguished air. She seems physically very feeble, and walks with a cane, but her whole air and conversation betoken strength of mind. She entertained us very much, talking straight on, without stopping to ask a question or hear a remark. With your eyes shut, you would fancy she was reading from a book. Yet she passed easily from one kindred topic to another, and all she said was extremely instructive and entertaining. She smoked with the gentlemen while talking and now and then made some remark or allusion which struck me as a little unfeminine. She told us a great deal that was interesting about the Arabs, and discoursed feelingly on the wrongs done them by the Egyptian government. Hearing that I was an old friend of William Thayer, she spoke warmly of him, and with much feeling of his death. . . . When Lady Gordon left us, we all felt we had enjoyed a treat in her conversation, but I am sure that she had talked enough for a person who has turns of bleeding at the lungs every few days. She hires her Dahabiyeh instead of a house, and lives in it all the time. She has been on the Nile for six years, and thinks she prolongs her life in this way. She stops at the little villages, goes ashore and makes friends with the Arabs, who all like her and make her welcome, she nurses the sick, and teaches the children, and has no end of friends from Cairo up to Ipsamboul. . . . After she returned to her boat, we steamed on to where we moored for the night.

Thursday, Jan. 2nd: We had a beautiful day on deck, the rocks, excavations and palms on the banks, making the shores very interesting all the way. At four we reached Assuan, and the

landing there was in the most beautiful and picturesque spot we have yet seen. Close to us the pretty banks covered with donkeys, camels, and Arab girls filling their water jugs, and on the opposite shore, the beautiful island of Elephantina, with its old ruins and Nilometer.

Friday, Jan. 3rd: We started early for the island of Philæ, on excellent donkeys, and forded a branch of the river at one place, and crossed in a boat at another. The ride was seven miles, and through a strange country. Such rocks and boulders as we have never seen before, and piled in every variety of shape. On the face of some were cartouches of very ancient date. As I rode more slowly than the rest, Hassan lingered behind to take care of me, and began to talk to me in his broken English. He said he had heard that I knew his first master, William Thayer. And when I told him I had known him from a little boy, he broke forth with great emotion and animation, "Oh, my dear Mr. Consul, you then have known my Consul, let me tell you of the death of my own Consul, he died in the middle of my arms. Yes, I, Hassan, did bring my Consul from Cairo, and he was too much sick." Then he described to me his last days at Alexandria, in the most graphic manner, and said at the end, "So, Ali and I, we laid our dear Consul on the bed, and I took him in the middle of my arms, and so he died, and forty Kewassas cry loud, when they hear my Consul dead. Ah, my lady, my Consul one good, kind man, but too much kind persons not stay too long in this world. But, long as Hassan live will he remember my Consul, William Sydney Thayer." And the poor fellow showed genuine emotion. How strange it seemed to me that I should be riding over this lonely desert towards Philæ, with this Arab by my side, listening to his account of William, whom I have not seen since you, dear Mary, were two years old, when he spent a few days with us in Philadelphia! I think everybody who knew him has a most tender recollection of him.

At last we reached Philæ, and dismounted at the temple surrounded by Ragbags, as Mr. Hale calls the Arabs. The whole place seemed to us wholly different from any other we had ever seen, and the situation the most picturesque. We mounted to the top of the Propylon, and I had a most magnificent view of the whole island. Then we went to a little separate temple overhanging the Nile, and in excellent preservation, and sat down on stones to eat our lunch, which Hassan distributed. While we were eating, an exciting scene occurred. All the little Ragbags, divesting themselves of their slight coverings,

precipitated themselves from the high rocks before us, into the Nile, seized each a slight log, on which they sat, and sailed off in the most extraordinary fashion you ever saw. They were very handsome boys, their skins exactly like brown velvet, their motions the very perfection of grace and agility, and they came up to us out of the water, dripping and shouting, and when we gave them each a half-piastre, their joy knew no bounds. After we had given this bonus, the number of little boys doubled and quadrupled in the most mysterious manner, and the entertainment was prolonged in the most exciting manner. Finally we retired to a corridor, and lay down in the shadow of the columns to take our naps. And the Moudiehr of the district came to invite us to go on board his Dahabiyeh, and shoot the First Cataract on our way home. And we bade farewell to Philæ and entered the boat. There were about twenty sailors to row, and splendid-looking men, a different race from any we had seen. They were Berbers, very black, but with finely shaped heads and features. TaWheel told us that they were considered a very superior people. As they rowed, they sang a wild song in the deepest and non-musical tones, a small boy leading them in a higher key. The little fellows on logs surrounded our boat, until we reached the Cataract, when they climbed the rocks in a hurry. Shooting the Cataract was most exciting. Hassan fell on his knees and prayed devoutly, he thought his last hour had come. Below the rapids, we found our own little row-boat sent from the steamer, and we rowed home in the most glorious sunset, and between the loveliest shores you can imagine. There is a purple glow in the skies here, that is unlike anything I ever saw.

Saturday, Jan. 4: We sat quietly sewing in our boat until an hour before sunset, for we were tired, and wished to think over all we had seen. Then we took our donkeys and went to the Quarries, to see an immense obelisk, which had been hewn out of the solid granite, three thousand years ago, and partly carved, but left unfinished and never removed. The block was enormous. Our ride home through the Bazaar of Assuan, and our windings along the rocky shore, the long shadows of the palm-trees on the sand, was something indescribably beautiful. We found Lady Duff Gordon's boat had arrived, and was moored close to us, and we intended to call on her in the evening. But her son, a boy of seventeen, came in to see us, and he said that his mother had been raising blood, and was obliged to keep her bed, and not talk, so we gave up the thought of seeing her, with regret. We invited him to lunch with us the next day.

Sunday, Jan. 5th: In the morning we had a visit from the French Minister Plenipotentiary, who is in another of the Viceroy's steamers, just below us. He is one of the handsomest and most elegant men I ever saw, . . . about sixty. Young Gordon also came, and soon after a youth named Coope accompanied by his tutor. Coope and Gordon were delighted to meet, they had been school-fellows at Eton. Gordon is the son of a Baron, Coope the son of a great London brewer whose ale goes all over the world. . . . We bade him (young Gordon) Good-bye, after lunch, as our Captain was all ready to leave Assuan. Sorry were we to feel that our voyage was ended, and we were turning back towards Cairo. We left amidst cheers, and guns, and waving of kerchiefs from the two English and the French boats; but we had scarcely turned a bend in the river, which concealed them from our view, when we got stuck in a sand bank. After every effort had been made by the sailors to get us off, Mr. Hale sent our little boat back to Assuan to tell the Mudir of our trouble, and at sunset 250 men appeared, who worked like Trojans all the evening, and at eleven o'clock succeeded in setting us afloat. It was a very exciting scene. The moonlight was splendid, the men at the ropes sang in their strange deep tones, keeping time to their work, some of them in one key, the rest higher, but in perfect harmony. Lucretia, Susie and I all walked the deck and watched and listened, and looked at the old ruins on the Island of Elephantina.

Monday, Jan. 6th: We steamed to Edfoo, which we reached before sunset. I sewed all day, and watched the beautiful shores. After dinner, we took donkeys and went to see the beautiful temple by moonlight. It impressed us even more than before, as we stood in the splendid court, and looked at the innumerable columns and the tall Propylon. We mounted the dark inner staircase, each taking a candle, and after going up 245 winding stairs, found ourselves at the top, with a grand view around us, as far as the eye could reach. It is higher than the Arch of Triumph in Paris. We returned home, much satisfied with this expedition, though very tired. My donkey sat down twice, and got down on his knees once, so your father walked beside me the whole way, to and from. But he slept soundly afterwards. This life in the open air all day, week after week, agrees well with both of us. For we live on deck all the time when not taking excursions.

Tuesday, Jan. 7th: We steamed on to Esneh, where we were three hours taking in coal, and I went with your father to see the little temple of the Ptolemies, which I had not visited when the rest went. It is very perfect. I think you can hardly imagine

how strange it seems to see these splendid old buildings, emerging from a vast pile of rubbish, mud cottages that have been built over them and within them and against them, century after century, until the very tops of their high structures are even with the ruined villages around, and with the sand that has blown in from the desert. Yet this perpetual covering over has served to preserve these old intaglios and bas-reliefs, as they never could have been [otherwise], and to give us now this dim history of those far-off times. We steamed on, and reached Luxor at dusk. The aged Mustafa hastened to the landing, but he looked so ill and infirm, it made us sad to see him. We have got very fond of the dear old man.

Wednesday, Jan. 8th: We stayed quietly in the boat writing our Journals all the morning; and in the afternoon we went to visit a strange personage, a Mr. Smith, an American. . . . Smith is, however, learned in hieroglyphics, and gave us much information that is valuable to your father. Then we mounted our donkeys, and he went with us to take a last look at the temple of Karnak. On the top of the Propylon, we sat down, when Mustafa again sent his servants with coffee, and there we rested on carpets and looked down through the moon-lighted columns, and over the wide plains, until ten o'clock, the air as soft as one of our evenings in July.

Thursday, Jan. 9th: We rose late and prepared to leave Luxor, but Mr. Hale said he could not bear to go, without settling the long quarrel between Smith and Mustafa.—

So he appointed to meet them at Mustafa's house, and after a session of six hours, advancing money of his own, he arranged their difficulties, and made Smith promise never to persecute Mustafa more. Mustafa came back to lunch with us, and said, "Now I am no more sick, the Consul General has lifted my burden, I am at peace." I have seen no one who has reminded me of my dear father as this old Arab, with his perfect dignity and benignity of mien. He stood on the high bank against the sky, as we steamed away from Luxor, waving his handkerchief, and too soon we saw the grand columns of his house, the American and English flags above, the beautiful shores and groves of palms, the troops of Ragbags, and donkeys, and camels, recede from our view forever. Farewell, Mustafa Agha! We

steamed on for twenty miles, when we met the Dahabiyehs of the Tuckers and Rodmans, but as they were under full headway, they could not stop. Mr. Hale was asleep, but we stopped our steamer, and Mr. Lesley and Susie, with Hassan, took the little boat and went to see the Rodmans. They were gone a half-hour, and came back delighted with their visit. The Rodmans are delighted with their slow life in the open air, but regretted not having reached Thebes before we left. We spent our evening very quietly, reading and playing Piquet.

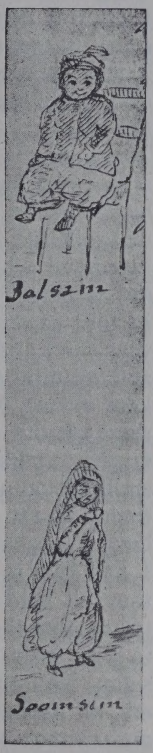
Friday, Jan. 10th: We steamed on. Although we met the Dahabiyeh of the Lawrences, it was thought best not to stop, as it was important to reach Belliani before dark. A magnificent day, and I sat and sewed all day on deck. The fifteenth chapter of our Novel was read to-day. It was written by Lucretia, and highly exciting. We had no stops to-day.

Saturday, Jan. 11th: We went to-day to the ruins of Abydos, where your father found the list of all the kings of Egypt in hieroglyphics, from Menes down.—This list is one of Mariette's greatest discoveries, the excavation of this temple was only made three years ago. The cartouches, intaglios and paintings were all in very remarkable preservation, but I had not realized how far they were from the landing, or I should not have gone. I think I was never so tired in all my life.

Sunday, Jan. 12th: I spent the whole day on my back, and read aloud to Peter in Dr. Hodge's "Reason in Religion," which we both enjoyed, and also being alone in our cabin, away from all sights and sounds. We had reached Assyoot in the afternoon, and our Consular Agent Wasep, with his two fine boys, whom I mentioned three weeks ago, had come on board, and invited the whole party to dine at his house. All went, except Peter and me, and reported the next day a very remarkable occasion, a great dinner, dancing girls and buffoons, of the most singular description, for evening entertainment. They did not get home till midnight, and we only heard of the time next morning.

Monday, Jan. 13th: We had expected to leave Assyoot this morning, but Mr. Hale had ordered a parcel of letters to be sent to him here, and their non-arrival made it necessary to pass the day here, to telegraph to Cairo, and wait for an answer. These things are not managed in Egypt with the expedition we have at home. Four weeks to-day since we came on board this little steamer, and how we longed to have the silence broken between us and our far-off home! But neither letters nor telegrams arrived. Wasef and Wesa, the friend at whose house we dined three weeks

ago, both came to see us, bringing the boys, who seemed delighted to see your father, and very soon a troop of servants and retainers appeared, bringing Soomsim and the little Balsam, most gorgeously attired, to see me. They were followed by Arabs bearing trays and baskets containing presents for all of us, things made of pottery, and buffalo bone, etc. The little girls stayed two hours, and were extremely well behaved. As we had no method of conversing with them, Susie Hale amused them with a variety of tricks and sports and drawings, and they laughed a great deal. We learned that Soomsim is not the real sister of the boys, though they call her so; she is their cousin and is betrothed to the oldest of the two boys, to whom she will be married when she is twelve years old; she is eight now. Here is her picture, on the margin. Wasef insisted on our all dining with him to-day, expressed great sorrow that Peter and I were not present at yesterday's feast, and promised if we would go, he would have dinner at five and let us off earlier in the evening. He sent his best donkeys, very richly caparisoned, and at 4.30 we were all in the saddle, taking our course into the beautiful little city of Assyoot, the prettiest and most comfortable we have seen. What a strange party we made at the dinner table!—There were about twenty or twenty-two who sat down. Our Coptic host and his boys, his friend Wesa, his Syrian friend Zarifa, two Arabs, two Armenians, two Turks, two Circassians, two Greeks, the American Missionary, who is really a Scotchman, and his assistant,—a thorough Western girl, who wore spectacles, and was a Yankee of the most intense description. Amongst these persons our party was distributed, and we listened to twelve different languages, that were being spoken around us. Our host's eldest son, a fine fellow, waited on us, with about eight black slaves under his direction. He was about nineteen, and a very fine young man. He speaks French, and addressed us all in that language. Your father, addressing the two little brothers who speak English so well, asked them why they had taken so much pains to learn English. The youngest boy answered promptly, "Because I would not sit like a dog and make no answer when sensible



people speak to me, or know nothing of what they say." After dinner, we ladies asked Mr. TaWheel, if it would be considered good manners of us to ask to see the ladies of the household.—He said they lived quite by themselves and never appeared, but that Wasef would be enchanted if we expressed a wish to see them; which we directly did, and the eldest son was sent to conduct us to the Harem.—We passed through kitchens and entries to a distant room, a large bare, almost unfurnished room, quite different from the splendid parlor in which we were received. There on a divan, at one end, sat eight women. Wasef's wife and two sisters-in-law, one a widow and the mother of Soomsim, the two wives of his sons, and the others I could not make out. The young wife of the son who conducted us, was but thirteen, and a real beauty. She was dressed in an elegant brocade with loose-flowing Turkish pants, and a beautiful black velvet tunic embroidered with gold. Her black lace veil was beautifully embroidered with gold, and her young husband told us that she did it herself. She had a sweet innocent face, and her name, he told us, was Wurda, the Arabic for Rose. He was evidently very fond and proud of her. The women were all very friendly, and examined our clothes and desired us to examine theirs, and kept asking Miss McKeoun, the missionary lady, to tell us that they felt our visit to be a great honor. But they are not accustomed to conversation, and have very little to say. They looked smilingly at us, and seemed childishly pleased that we admired their dresses. When Miss McKeoun told them that I was a married lady, they asked if I had children; and when they were told that I had two in America, and had been so long away from them, they all held up their hands in amazement, and begged her to tell me that they would all pray the Lord that I might soon be able to kiss their hands (my children's). When we returned to the salon, we found the dancing girls, and the buffoon, and the singers, all assembled. But these are truly barbaric entertainments, and cannot be described on paper. We were glad when it was over. Our little Coptic boys, Tadris and Farida, stuck close to your father, and Tadris said to him, "Those girls will dance as long as they live, and then they will go to hell." He seemed surprised that your father did not entirely assent to the last part of this remark. We ladies and Peter went back to our boat, leaving the rest of the party for some hours longer.

Tuesday, Jan. 14th: We left Assyoot without our letters early in the morning, and steamed all day, without any remarkable occurrence. Peter wrote the seventeenth chapter of

the novel, and I read it aloud at lunch. We reached Minieh at sunset.

Wednesday, Jan. 15th: We steamed away in the morning, passing the day most pleasantly, reading, sewing, etc.—It was a windy morning, and for the first time since we have been on board, we had to have lunch down in the cabin. Only think, dear children, of our taking all our meals for more than four weeks in the open air, with a cloudless sky above, and the softest air around. You know that rain never falls in Upper Egypt. The missionaries told us they had not seen a drop of rain in three years. At lunch I read aloud the eighteenth chapter of the Novel, by Susie Hale, and it was received with rounds of applause. We thought how Aunt Meggie would enjoy it. In the afternoon we reached Benisuef, where our old friend Mazzalla Lucca, the Consular Agent, again came on board, and welcomed us. The evening was passed quietly by the party, playing chess and Piquet, while I sat reading. We are all disappointed beyond telling, to learn by a telegram to-day that by some mistake all our letters in Mr. Hale's packet have passed us and gone to Luxor. Mustafa will send them back, but to wait six weeks for them is trying. And who knows what we have missed, or how important some one of them may have been?

Thursday, Jan. 16th: We steamed on all day to within ten miles of Cairo, when we stopped for the night, as the party wish to go to the Pyramids of Sakkara to-morrow. In the evening, Mr. Hale read the nineteenth and last chapter of our Novel, which he had written, and which wound up all the characters finely. It has been an immense entertainment to us. We packed up our valises, for we have but one day more on board.

Jan. 16, 1868: Ten miles above Cairo. Here we are stopping to go to the Pyramids of Sakkara to-morrow, and next day, Saturday, the 18th, we reach Cairo, after an absence of five weeks. I have kept a regular journal of the whole time.

Friday, Jan. 17th: All went off to the Pyramids except myself. I passed my day alone, writing letters.

CHAPTER XXIII

England and Home Again

The beautiful Egyptian winter over, my father and mother were anxious to return home. Health was in a measure regained, and, although still far from being a well man, my father felt that he might hope to take up work again with caution.

They first went to Naples, where they found my uncle Edward Lyman and his family, and also some old Philadelphia friends. Unfortunately, on an expedition to Pompeii my mother had a slight sun-stroke, which prevented her from doing much sight-seeing during the remainder of her stay in Italy.

She had had a slight sun-stroke in Pau the previous winter which had left her head in a sensitive condition. She never fully recovered from the effects of these two sun-strokes, but always suffered much during the summer heat, and was obliged to take unusual precautions to avoid any intense light.

From Naples they went to Rome and to Paris, and spent their final month in England, which to my mother seemed more homelike than any other part of Europe.

Canterbury, *March* 29, 1868. Susan I. Lesley to her Children.

. . . My dear Children, do you see the date of my letter? Do you see that we are really in England?—Actually passing the night in Canterbury, the very place where David Copperfield lived when he went to Dr. Strong's school, and where the Micawbers turned up, when they came to see the Cathedral. . . . At four o'clock this afternoon, I put my foot on British soil, for the first time. I can't tell you how happy it made me.—To hear every one speaking our own language, to see people with our own

homish ways, for the first time for a year and a half, was perfectly delightful. . . . I have seen nothing in France that so enchanted me. And yet this is but the end of March, and England is not in her glory before the end of May. But I have seen more natural *beauty* in the last three hours, and more exquisitely cultivated nature, than in all my stay abroad. Not the *grandeur* of the mountain scenery I delighted in in Switzerland, I am speaking of *beauty* alone. . . . [My father adds from Wood's Hotel, Furnival's Inn, London]: Your dear Mother was in ecstasies all the way. I have not seen her so like herself since we left home. She is delighted with the English Inns, and even praises the apology for sunshine which filters down to us through the great yellow brown sediment of smoke and dust and fog, which lies over London, at the bottom of the great ocean of atmosphere. . . .

STRATFORD-ON-AVON, *April* 17, 1868. TO HER DAUGHTER MARY.

. . . Last week we spent in London with Mr. and Mrs. Greville, those kind friends who were with us in Switzerland last summer. . . . On Monday we returned to our hotel, where we found a letter from Mr. Flower, the Mayor of Stratford on Avon, inviting us to pass a week with him. Your Father met him in Italy [winter before last] and they got to like each other very much. Mr. Flower's parents emigrated to America with him a baby, and settled with some neighbors on a Western prairie, where they built the town of Albion in Illinois. There they lived and died, and many of their descendants still live there. But this Mr. Flower, when he got to be twenty-one, came back to England, and to his native place. Here he established a great brewery, became very rich, has built a beautiful house on the brow of a hill overlooking the Avon, and in sight of the birthplace and the grave of Shakespeare. And here he takes especial delight in inviting Americans, and the amount of kindness and hospitality he shows them cannot be told. He is a man of large and liberal views, and rare common sense.

. . . All through our war, he fought with voice and pen for the Northern cause, against all his aristocratic neighbors. . . . Last Sunday, Easter, I went to hear Mr. Brooke who wrote Robertson's life. And I was delighted with him. Dr. Channing never exalted human nature, its powers and capacities, more.

SALISBURY, *April* 30, 1868. TO HER LITTLE DAUGHTER MARGARET.

. . . But what interested me more [at Warwick] was a beautiful sculptured child, lying on a sarcophagus above his [the Earl of Warwick's] tomb, and bearing the inscription, "The Noble Impe of Warwick."—Poor little Imp! He was the son of the Earl of Leicester, and heir to eight titles,—and it has always been believed that he was poisoned by his nurse. . . . Oh, Meggie, no child ever need envy any of these little children of noble or royal blood. Even now they have a very poor chance indeed, but those who lived two or three hundred years ago, were even worse off. . . .

After breakfast [at Oxford] we went to the Museum, and there Dr. Rolleston received us with the greatest kindness, introducing us afterwards to Mr. Goldwin Smith; and took us home to a quiet family dinner, where we saw his wife and his little boy, named for his uncle Sir Humphry Davy, and a dear old man, Prof. Phillips, whom your Father has wanted to see all his life. He is one of the fathers of Geology. Oh, it was really hard to have to leave these pleasant people very early after dinner, and just as we were getting acquainted.

. . . On Sunday, Dr. Rolleston called for us to go to the University Church, and there we saw the Dons and Bishops and Professors, in their splendid robes and insignia, and heard a good but very heretical sermon for the English Church; and then Prof. Phillips joined us, and insisted on our going to his house to lunch, and as we went took us to the spot where the martyrs Cranmer and Ridley and Latimer were burned at the stake. . . . After lunch, at which he talked delightfully, telling us sweet stories of Mrs. Somerville, the lady who has done so much in Astronomy, he took us to his observatory in his garden, and then to the great Radcliffe Observatory, where Mr. Mayne, who has charge, showed us everything. . . . We had promised to take tea at Dr. Rolleston's. . . . So Mr. Phillips very kindly proposed that your Father should return to his house and rest until it was time to go. So we left him alone for two hours on the sofa in his library, and Mr. Phillips came to the parlor and showed me a beautiful collection of water-color sketches of his own. . . . We took tea at Dr. Rolleston's, and left at nine, promising to send all good Americans to him. "For you know," said he, "Goldwin [Smith] and I were all right, all through your war."

. . . Yesterday at eleven we took a fly, and went to Stonehenge

—we had a beautiful drive over the Plain, stopping for a half-hour at the house of a Mr. Duke, a country gentleman, who has a very fine collection of amber antiquities your Father wanted to see. Nothing can exceed the politeness of all these literary and scientific English Gentlemen. They are full of enthusiasm, as communicative as can be, and we have yet to see the first instance of what is called English coldness. . . .

CHAPTER XXIV

Return to Work. 1868–1872

On their return from abroad my parents spent the summer in Keene, N.H., with their children, and in the autumn my father returned to Philadelphia, finding that he could bear a little work. He was at first able only to resume the quiet occupation of librarian and secretary of the American Philosophical Society. To this he added, a few months later, the editorship of a railroad and mining journal.

The family joined him in November, and that winter passed uneventfully but happily to all, in the reunion of the household after nearly two years of separation. Now began for the children that more continuous and intimate companionship with the father and mother, which was for the fifteen years to come the chief happiness of their lives. The winter of 1868–69 was spent in a boarding-house, but in the autumn of 1869 the family moved back into the quiet street of their choice, and the house, No. 1008 Clinton Street, became for twenty-five years that family home for which my mother had longed in secret through the previous years of frequent change and anxiety. Here at length she was able to rest quietly in the hope that she had found a haven where she could establish such a home life as she had dreamed of, and where not only her many friends and relatives would come to her, but where also she could minister to those who needed her help.

It was not a large house, and my father's books, maps, minerals, and all the valuable odds and ends of a scientific man's belongings used up much of the rather contracted space; but she never desired a better abode. It was a rented house, and held only from month to month, but, if "use" gives proprietorship in a transcendental sense, we cer-

tainly owned 1008 Clinton Street for twenty-five years. Every foot of its enclosed space was in active possession during that period. I remember most vividly the many quiet hours (and especially those after the mystic hour of 7.00 P.M.) in which the household were alone, and could settle down with the always present "family book,"—some volume for "mutual" enjoyment,—each member with some work on hand, but more than ready to take a turn at the reading aloud. Many were the histories and biographies, essays, novels, and books of travel which we enjoyed together. Certain names (such as those of Faraday and Mary Somerville) will always be associated in my mind, not so much with their own country as with that cheerful front parlor on Clinton Street, with its pictures and books and that hospitable, bright soft-coal fire which each member of the household understood the tending of better than any one else. Before that fire we visited all the kingdoms of the earth, rejoiced and sorrowed with hundreds of life's heroes, both real and imaginary, felt our hearts beat to the time of world movements of all ages, and, best of all, enjoyed everything together. Very frequently friends gathered round the fireside with us to join in the pleasures of the reading and give us added satisfaction.

My father and mother were always eager to share what they enjoyed with those they loved. If a friend appeared at meal-time, it was but to call for another plate and make room for the new-comer at the table. There was no uneasiness as to the fare. What *we* were enjoying was of course what the friend would enjoy, too. My mother would, indeed, sometimes say with a little anxiety after a meal: "*Do* you feel as if you'd had enough? I'm afraid it was rather poor 'pickins!'" but she never allowed any such consideration to prevent her inviting the guest to share what we had.

With the same feeling, when we were absorbed in some fine bit of reading and a guest arrived, after the first greeting and inquiries were over, either my father or my mother would be apt to say, "We are in the midst of"—such and such a matter—"wouldn't you like to hear a little?" And

I think the guest usually enjoyed that also with us. Of course all this required tact and a perception of human relations and personalities; but what is good society without these? Perhaps some were bored, but they never showed it if they were. Of so-called "society," we knew nothing. Both my mother and father were too busy, as the years went on, to pay any attention to ceremonious calls. They cared little for mere acquaintanceship, but had the finest faculty for friendships. Also, they were both delicate, and the formal duties of society would have been impossible to them for this reason, if for no other. Indeed, after his severe breakdown in 1866, and his recovery two years later, my father was never able to endure the sound of many voices in a room, for any length of time. In the years of our greatest social enjoyment, he would come down from his quiet study to join in any festivity for a half-hour perhaps, but soon disappeared again to his books or writing, or to his drawing-board.

Until we moved into the Clinton Street house, he had never had a place that he could call his own, but in that house he had a fairly large and sunny chamber, where all his implements for scientific work were brought together; and there he reigned supreme. My mother's chief aim in life for a number of years, was to see that this room was never invaded for alien purposes.

This return to Philadelphia marks the beginning of her strong affection for the place, which strengthened with each succeeding year. In a letter of May 2, 1869, she writes to my father, "Oh, I love Philadelphia now, and am glad to know it is my home."

It was about this time that my father took up a more regular system of life, which gradually became constant (when he was at home in the city) and was of great benefit to his health. During the morning hours he worked with the intensity which was habitual to him. After a light meal at two o'clock, he used to walk to the Union League, where he spent two or three hours playing billiards,—a game of which he became fond,—and where he made friends who were unconnected with his work. He enjoyed the

game for itself, and took as much pleasure in the skill of the other players as in his own achievement. Indeed, *competition* had no charm for him. He scoffed at the idea that any play (or indeed any worthy work) needed any reward or incitement to interest outside of itself. To offer any such reward was to spoil his enjoyment in it. Sometimes he would work again, at the end of the day, for a couple of hours, and often for a portion of the evening,—but usually after dinner, at 6.30, he would join the family, and read aloud himself or listen to some other person reading. Ten o'clock was religiously held to be the proper hour for bed.

The editorship of the *United States Railroad and Mining Register* began in 1869. This gave him ease of mind because it afforded him a regular though small income. He writes, April 27, as follows of this new occupation:—

It is in one sense a sort of intellectual Clerkship, and it will require some weeks or months to get used to it. But it is not the slavery of a daily editor, and has some noble features, which I will improve. It is not unpleasant to cull the best thinking, and state the best practice, of the age, and publish it for the benefit of my countrymen. And there is scope for a sober and just ambition.

Of his work as editor Mr. Benjamin S. Lyman says:—

In May, 1869, however, besides his Philosophical Society duties and occasional private geological surveys, he consented to become the editor of the *United States Railroad and Mining Register*, a weekly newspaper of enormous folio size, published at Philadelphia in the interest, more particularly, of the railroads; and he continued to be its editor until the end of 1873. The paper not only contained railroad statistical matter and reports and news, and frequent republication, in full or in abstract, of scientific papers with their photo-engraved illustrations that had been read before the Philosophical Society or elsewhere in America or Europe, but weekly he wrote for it fresh, breezy, cheery, clear-cut, picturesquely flower-bestrewn, spicy, authoritative editorial comments on railroad, mining, surveying, geological, scientific, philosophical, theological, political, politico-economical, American or European subjects of the day; in short, on things of every

sort, and some others. These remarks of his are still entertaining, and are particularly interesting as indications of what occupied his attention during that period; though they are now almost irretrievably lost, from being buried within the leaves of an unwieldy sheet that its very form prevented from being kept accessibly on file.

At some time during the summer of 1868 there came a tentative offer of a professorship of geology in the then *new* Cornell University at Ithaca, N.Y. The idea was a very attractive one to my mother, who thought that life in quieter surroundings, and with an assured and regular income might, in the long run, be better for my father's health. He also was attracted by the beauty of the place and the opportunity to train young minds in the science which he so much loved. But his dread of change, and his affection for old friends and familiar surroundings in Philadelphia, caused him to hesitate, and finally to abandon the scheme. I do not think he ever regretted his decision, nor did my mother, although the following years were probably more anxious and wearing than they would have been upon the academic heights of beautiful Ithaca.

A few years later came a similar opportunity, which he gladly accepted, to take the chair of geology and mining engineering in the University of Pennsylvania. Here he was at home, and with the University he had ties of long standing, so that there were not the same reasons for dreading the professorial duties.

In January, 1869, my father went to Baltimore to give a short course of lectures before the Peabody Institute.

In April of the same year he went to Newcastle, Del., to give a lecture to the workingmen of the place.

During 1871 and 1872 my father made several surveys in the South.

KEENE, *June* 14, 1868. PETER LESLEY TO HIS WIFE.

. . . Margaret [White] has compelled me to write a dedication ode for the new church, which will be ready about the fifteenth of July next. I give it to you on the next page.

DEDICATION HYMN.

Lord of the Sunshine and the Shade,
  Mountain and Valley; land and sea;
Lord of the living and the dead,
  We dedicate this house to thee.

Though worlds of space are not enough
  To entertain thine awful throne,
We dedicate to thy dear love
  This little tent of wood and stone.

Look forth, All Father, from the vast
  Of thine unknown immensity;
Remember the eternal past;
  All things have ever worshipped thee.

We praise thy works, so grand, and sure;
  We bless thy reign of truth and grace;
Therefore to Thee, thou true, and pure!
  We dedicate this resting place.

Peace be within the sacred porch!
  Light from the heavens fill all the air!
And may our daily lives avouch
  That Christ has been our teacher here.

Here may our souls, from sin set free,
  Triumphant wars with evil wage!
Here babes of grace be born to thee!
  And Prophets to the Coming Age!

What you wrote about Mr. W. not liking the book ["Man's Origin and Destiny"], and thinking it *injudicious*, and *therefore like me*, hurt my feelings badly. I do not care what the unknown millions of men and women think or feel about my thoughts or deeds—but the least disrespect to me from a dear friend is a stab through the heart. Friends are bound to maintain that what we do is right—and right because it is we who do it. This is a *sine qua non amicitia*. But I shall try to think no more about it. Please don't talk any more about getting the book noticed.

There are but two ways for that,—one is: for the book to be a good one, too good to be overlooked, the other is: to pay for noticing a poor book, and that is the publisher's business, not mine. . . .

KEENE (P.O. BOX 45), *June* 27, 1868. TO MR. BEN. S. LYMAN, PHILADELPHIA.

MY DEAR FELLOW,—You deserve fifty long letters instead of one tardy little note. Your maps are really magnificent. They are wonders of careful work, both on the ground, and on the table. In fact you have struck out a new style and will probably introduce a new fashion,—or rather I should *would* introduce one if there were any well-trained geologists in the country to copy your style. But you must find it costs enormously in time and brains. I don't object to that myself, you know. And it is the only foundation for a durable reputation.

Let me suggest that in southern surveys you do not use the term "drift" for "adit" because of the ambiguity; at least until Agassiz's wild assertion of diluvial scratches or rather glacial marks existing in Georgia be proven or disproven. I was startled by the occurrence of the word on your Stephen's Tract Map, until I noticed the ⎍⎍.

I wonder how it would do to leave out the road lines and trust to the eye following the contour curves thus, adding perhaps dots on the side of the road where the shade would fall. I wish we could as easily get rid of the lines for watercourses. They are a great nuisance.

Is the lead on this Stephen's tract or Sayer's mines anywhere near the Fulton? Your map of the Staley Co. and Nick's Co. iron region is exceedingly interesting, and well done. How completely it proves the aboriginal or endemic character of the brown hematite of the lower Silurian outcrops. I wish you could have it published in the *Geological Magazine*, London, which is now the common reservoir of all fresh geological work.

By the way a *Pteraspis* (*Ludensis*) has been found by some one (Mr. Lee) in the Lower Ludlow. Rich, to find vertebrates below the top of the Silurians! On the other hand, Murchison in his last edition of "Siluria" abandons the Old Red reptiles of Scotland, and accepts Geikie's determination of the rocks of Elgin and Ross-shire as New Red,—with Hapley's Identification of the Scotch reptiles with those of the Warwickshire New Red. Look at p. 85, no. 44, Feb'y, 1868, *Geo. Mag.*, London.

I find that a very little reading in geology knocks me up. So

SUSAN INCHES LESLEY

From photograph taken probably about 1870

I stick for the present to novels, newspapers, and the hieroglyphics. If you see Joe, thank him for his new tobacco; but tell him I have just received notice that a lady in Boston (Mrs. Dr. Morison) is going to send me up some Latakiah.

We greatly want, however, our hair pillows; and I want my Bunsen, vol. 1 ("Place of Egypt in History")—and my Coptic Dictionary. But we shall think of other things, in a few days, and ask to have a box sent on to us via Boston; so do not trouble anybody about these things. I thank you for all you did for Susan. Hope you will enjoy Chicago.

Ever Aff'y yours, LESLEY.

BELMONT STATION, NEAR PHILADELPHIA, *Aug.* 15, 1868.
TO HIS WIFE.

. . . I thank you for telling me so plainly all you think and feel about Ithaca. But you still put it on the ground of my health, instead of on the ground of your welfare as you see it. My health can be cared for equally well perhaps anywhere. But if there be a difference, my judgment rather leans to the belief that I would have a better chance *here*, in a warmer climate, among my old friends, enjoying the absolute liberty I do at the Library work [American Philosophical Society Library], and with no necessity for more than two or three geological excursions through the entire year,—than *there*, in new and perhaps awkward relations, with incessant daily work, great responsibility, and competition with younger and better drilled teachers. I should teach without having been trained to teach,—make my illustrations when I ought to be asleep,—read late at night, under anxieties about the next day's lecture,—be called upon to visit and receive visits frequently,—have my sympathies drained by young people—and get no holiday in the year, except during a month or two of the hottest weather. I draw the darkest picture I can, it is true; but only because I never yet knew any work which I undertook to be *less* but always *more* exacting and difficult and responsible than it had been described to me.

This was quite true, not because of the hardness of the requirements made upon him, but because of his own ardent temperament and comprehensive view of the possibilities in a given work.

. . . But it is useless to ask advice of anybody. Nobody can give it to me. I assure you it is a tremendous enterprise to *emigrate* at my time of life; and all nature cries out against emigrating *northward* instead of *southward.* Westward is bad enough. . .

A few days later he writes on the same subject:—

Aug. 18, 1868. TO HIS WIFE.

. . . I am afraid I did not please you with my letter of yesterday. But how can one paint a rainbow, or describe the ever-varying outlines of one's thinking over an important project? It is impossible not to assign too much value and weight, now to this and then to that. And I am frightened to think in how many cases the result is concluded at one or other of the extreme limits of the oscillation; as it is in shooting at a mark. I have many reasons for wishing to live the rest of my life here. . . .

In September he visited Ithaca, and was much struck with its beauty.

SPRINGFIELD, *Sept.* 29, 1868. TO HIS WIFE.

. . . I was so sorry to leave you in such a flurry. An hour's ride quieted my nerves and it was impossible not to admit the calming influences of such lovely scenery. The colors were already delightful to the eye. I stood on the hind platform to study the topography until we swept across the river at South Vernon. . . . I felt a strong desire to take up the topography of the Connecticut Valley, from Northampton Northward,—as a job of pure science for one, two or three summer seasons. But *Ars longa, vita brevis.* How we appreciate the old Latin apothegm as age creeps on us, with enlarged views and failing powers! . . .

PHILADELPHIA, *Oct.* 8, 1868. TO HIS WIFE.

. . . Went to see Dr. Furness for an hour. He has Mrs. Mott, C. Sumner, and R. W. Emerson hanging in his rooms—great people for one age. Emerson's likeness is wonderfully fine. If Wm. Henry Furness * lived only to send down that great be-

* William Henry Furness, son of Dr. William Furness. He was an artist of some note but who died young before his works had become widely known.

loved face to posterity, he lived long enough. It is a perfect likeness.

Oct. 28, 1868. TO HIS WIFE.

. . . I have been reading some Kalmuck fairy tales. They are most curiously allied to the old Egyptian *Märchen* of Mustapha, and give me great delight. I get on slowly with Lepsius' *Aelteste Texte.* Yesterday I tried Jean Paul's "Titan"—the first volume. There are exquisite flashes of rosy poetry, and deep glimpses into life. But I cannot comprehend his story, and most of his expressions are as mysterious as the "Todtenbuch" of Egypt, or Goethe's "Faust." The atmosphere in which an author lives, gives occasion to produce by his genius a strange chemistry of ideas,—as wonderful as the forms and colors of flowers. . . .

Apropos of a certain biography which he was writing, he says in a letter of Nov. 4, 1868:—

I have passed over in silence all that part of his career which made so profound and painful a sensation in this community. I could not say what I neither felt nor believed.

I no longer believe it needful to drag the unwholesome into history, merely because it happened. We are to be historians of what is memorable and imitable. As we are taught by the Apostle to forget many things that are put by time behind us, in order the more lightly burdened to press forward to the better life in front. I have therefore dwelt entirely on his public spirit, his intelligence, eloquence, and good resolutions, and described only the benefits he conferred upon society.

Probably in January of 1869. SUSAN I. LESLEY TO HER BROTHER JOSEPH LYMAN.

. . . I wanted to write you how Peter dined most unexpectedly with General Grant three weeks ago, and had two or three hours of the most quiet good talk with him on all the great subjects before the country. And he was charmed with his perfect simplicity and frankness, and entire right-mindedness. He said he was entirely free and outspoken, as man to man, no President about him.—Once only in the eve he alluded to himself, and then so as if it were another person that Peter did not think of it till afterwards. He said, alluding to southern troubles, "now if the Executive only does so and so, such will be the result."—

PEABODY INSTITUTE, *Jan.* 23, 1869. PETER LESLEY TO HIS WIFE.

. . . I walked out to John Ware's house and sat twenty minutes chatting, and then returned. He asked cordially after you and the children. . . .

Wingate, the editor of the *Sun*, came again for his report No. 2 which I had corrected (and send you enclosed), and he gave me a ticket to the Classic Concert at the P. I. I went. The room blazed—was packed (1500 people)—all rose and clapped General and Mrs. Grant, and his escort of Trustees filed down to empty reserved seats, amid great emotion. Lorgnettes were in demand. Poor fellow! Who would be president at such a price?

Fine music—Overtures to Rossini's "Siege of Corinth" and "Semiramide"; Cavatina from "Torquato Tasso," by Miss Hunt.—But the *chef d'œuvre* of the evening was Mad. Weiller's piano rendering of the Romance and Rondo in Chopin's Concerto in E minor. I understand Chopin now. Rossini's and Donizetti's music paled before it, as an ordinary man's conversation in a company presided over by Coleridge, or Macaulay, or Thackeray, or Emerson. He never harped upon a theme, as if he had no other handy to replace it. It was all so spiritual. . . .

January 26, 1869.

. . . Oh, what an infinite blessing we are granted, we parents —in this divine arrangement of children, in babyhood growing up to womanhood, and no doubt all through to the very end, in spite of *contretemps* now and then! If we can only secure them against the storms of their own lives, by well building and well ballasting the little ships for the voyage of life! You do not know how many hours I spend brooding over this duty, and the way to fulfil it. I must seem to you so full of my business and my hobbies, that there is no space or time in my mind for such thoughts. But they occupy me a great deal, even when I seem quite indifferent to everything but the occupations of the day. . . .

I lectured last night to a small audience. My lectures are too pragmatic ever to be popular. I could not succeed in that line of life. I was made for a teacher, but not for an orator. Besides, small courses crowd one hastily along a subject. I should like to lecture an hour a day regularly, for a semester, to a class of honest, earnest, young students. . . .

April 29, 1869. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

[Concerning a trip to Washington to a meeting of the National Academy:] . . . Peter and I had a very good journey to Washington, Dr. Leidy, Dr. Wolcott Gibbs and Dr. Gould being the only other Scientifics in that train. When we reached there, we were sent to Ex-Secretary McCullough's. The other gentlemen went to the Smithsonian Institute.

. . . I went to the Academy meetings every day I was there, and enjoyed them much. Mr. Alex. Agassiz read the most interesting papers, especially one on "Beavers and their Habits," and there were a number of very interesting discussions. . . .

Peter took me to see the Capitol. No building in Europe seemed to me grander or more impressive. It is a wonder. Mr. Sumner was making his splendid speech while we were there, but there was no admission for any one; the Senate was in Executive session. Nor could we see him. . . .

PHILADELPHIA, *May* 4, 1869. PETER LESLEY TO HIS WIFE.

. . . I mailed you this morning a very remarkable speech of Salazar, leader of the Liberals in the Cortes of Spain. Get by yourself somewhere, and read it with attention. Read the Canon of Victoria's speech in defence of the Papal Supremacy, which brought out Salazar's reply. And especially remark the description of the great scene which took place in the Cortes afterwards. . . .

PHILADELPHIA, *June* 23, 1869. TO HIS WIFE.

. . . Leaving you yesterday, . . . I . . . walked over to Pinckney Street, and saw George Hillard five minutes . . . and sat an hour with Cousin Susan, part of the time talking with Mr. Sumner, who scolded me vehemently for not calling on him in Washington, saying he should have given me a room in his house, and used me as a buffer against his clients, and place-hunters. [Susan Hillard] told me how he had once come to their house late, after Longfellow was in bed, and how Longfellow opened the window and cried, "Sumner! is that you? I wish I had something to throw at you! But I have nothing but my boots, and I can't spare them,"—and down went the window sash again. . . .

June 24, 1869. TO HIS WIFE.

. . . I am uproariously healthy myself, perfectly overrunning with life, and enjoying my occupations every moment of the day.

MILTON HILL, *June* 17, 1869. SUSAN I. LESLEY TO HER HUSBAND.

. . . I have had a sort of vision that you might be coming on here to the Peace Jubilee, to report for your paper. . . .

Did I tell you about taking tea at Cousin John Forbes', and Mr. Emerson's coming there in the evening, looking entirely his grand, dear self, not a day older than twenty years ago? . . .

Monday I dined with —— ——, and to keep off from personal topics I engaged . . . in science, and the amount of wisdom I gave and acquired, would surprise even my bosom friend. I carried Mr. Foulke's memoir,* and your Notes on the D'Orbigny Papyrus, and in the full armor of Hadrosaurus and Hieroglyphics, I fought the good fight for five mortal hours, and came home more exhausted than with any amount of gossip, but far less uneasy and dissatisfied. . . .

JAMAICA PLAIN, *June* 28, 1869. TO HER HUSBAND.

. . . Yesterday morning I resolved to turn my thoughts from the ruts into which they creep, . . . and get some spiritual refreshment, if possible. So . . . I went into Boston. I got out at West Brookline Street, and a few steps brought me to Columbia Avenue, to Mr. Clarke's Church. I was early. "Go in and take a seat anywhere," was the sexton's direction; so I went in, and sat for a half-hour, watching with interest the perfectly social, homeish look of the congregation, as they strolled in, one after another, and took their seats anywhere. It is not a handsome church, but it is every cent paid for, cost $70,000, and holds twelve hundred persons. It has the "upper chamber" look, that all Mr. Clarke's churches have, where disciples may gather together.—I confess I like it. The people have a free joyous look, as though quite unburthened. The texts around the ceiling were very suggestive. Over Mr. Clarke's head were these words, "There is joy with the angels of God, over one sinner that repenteth." Mrs. Clarke came along and sat beside me, very friendly and cordial, and we had a little talk before service. Mr. Clarke has no thoughts of Europe at present. He came in, looking like his very self. The service was charming, the whole congregation singing the old hymns, no organ leading. Then he preached, one of his perfectly simple, homely sermons, from "Give us this day our daily bread," yet every word lifted us up into a higher region, and sent away our earth-born cares. Com-

* Memoir of William P. Foulke, written by J. P. Lesley.

ing out, he greeted me cordially, and inquired after you in a friendly manner. But he was surrounded with friends, so I would not keep him. . . .

MILTON HILL, *June* 29, 1869. TO HER HUSBAND.

. . . This morning M. and I sat alone again at our entry window, sewing. Again she talked of her husband,—how she worships his memory! Told me with many sobs how happy his last days were, how he had beautiful visions all the time, saw her coming towards him over fields of ice and snow, with her apron full of flowers. . . .

To which on the same sheet my father answers:—

Is there anything so touching as the mingled joy and sorrow, hope and despair of a good soul left alone by the disappearance of its mate, or carried off itself it knows not where, to inherit a life everlasting, which it would gladly exchange for the society of the loved one it leaves behind! The demanded patience must be infinite. But can we not school ourselves in advance up to a fortitude which will be equal to the grand fatal emergency? I begin to think so; although late in coming to the conviction. This deadly aim of a weapon directed at us from afar, the moment of explosion unknown, the word of command to fire unheard, used to fill me with awful anguish. Left alone, or leaving you alone, was an equally intolerable thought. Well, well, patience and fortitude will put us through even death safely.

The full tide of work seems to have returned upon my father this summer, and demands of various kinds came in, many of which he refused. A few extracts from his letters will give an idea of the variety of interests involved. Besides these extraneous demands were others belonging to his own profession, which he accepted, beginning cautiously to take up again the professional activities of a geological expert.

July 21, 1869. PETER LESLEY TO HIS WIFE.

They wish me to go to Illinois, Kentucky, or Minnesota, to see the eclipse, but I think it would be paying too dear for one's whistle. A lot of our men, Stephen Alexander of Princeton, Morton of the Franklin Institute and ten or twenty more,

with telescopes, etc., have a private car given them as far as Chicago. . . .

July 20, 1869. To his Wife.

. . . I wrote a whole report, and drew a map yesterday morning, and got a hundred dollars for it to-day. But it knocked me up a little . . .

Aug. [4, 1869 *probably*]. To his Wife.

. . . Professor Seidensticker called yesterday, to know if I were willing to stand orator for the Centennial of Humboldt, next 13, 14 September. The 13th a great whole day's fête in the Park. The 14th evening, two orations (German and English), in the Academy. The committee of Germans have pitched on me, he says. I don't know whether to refuse or not. . . .

Philadelphia, *Aug.* 3, 1869. To his Wife.

. . . I have already settled down to my trot and pull in front of the wagon. On arriving yesterday at twelve o'clock (marvellous punctuality, this of steam!), I spent four hours over newspapers. I am a week in arrears, and don't know which way to turn. It is terrible to fall behindhand that much in the universal scrub race of Journalism. I feel as that last poor horse looked, coming down the Corso ten yards behind all the others, on the last day of the Carnival. . . .

Aug. [7 *or* 8], 1869. To his Wife.

. . . Mr. [Tom] Scott asked me yesterday if I would entertain a proposition to go with a party to examine a million or two of acres of coal, iron, gold, and silver, in the Raton Pass country, in ten days, —one week out, three weeks there, one back. I told him I would sleep on it. I am afraid. It would be steady railroad to the West line of Kansas, two days' stage then Southwest, to Raton Pass. Camp life. Soldiers' escort. Horseback exercise all the time. A month's work afterwards, *if* I were compelled to work up my notes in a report.

My paper interests me intensely. The Salem meeting comes next week. The Northampton meeting of the Academy is fixed for 31st August. . . . There will be all sorts of nice things said.

He wisely declined both this Western expedition into Colorado and the Humboldt oration, previously mentioned, remarking in explanation, "For I stagger a little even under

the light burden which I carry here." Nevertheless, the cheerful, even gay tone of his letters of this summer, show a renewed delight in life, and the comforting assurance of his being again able to provide amply by his labor for those nearest to him.

Sept. 5, 1869. To his Wife.

. . . It is ten o'clock. I have written many pages to-day about Humboldt, which I wish to print next Friday. . . .

Then the 13th and 14th are the days of the Humboldt Festival. How I should like to hear Agassiz! . . .

Sept. 8, 1869. Peter Lesley to his Daughter.

. . . A friend of mine found an Indian, sitting on a log at New Madrid in Missouri, after the earthquake had sunk all that region, and changed the course of the Mississippi, and opened gashes in the earth, forty years ago. "Mr. Injun," said he, "what is all this?" pointing to the hole in the ground. The Indian looked at him in silence; then lifting his hand and pointing with one finger to the sky, said: "Whiskey—too much."

That was a perfect explanation of a natural phenomenon, productive of disaster and disorder—from an Indian's point of view: All barbarous people think of God as a governor, subject to like passions and infirmities with us.

The idea of *law* is the highest product of civilized wisdom. It comes of the study of the natural sciences.

But to make ourselves *satisfied* with this idea of law, sweetly submissive to it, we must add to our science, *love*, and regard God as *good*, as well as wise.

Put these two ideas together, and we get the Father in Heaven, whom Jesus taught his disciples and the world to know and love.

Science knows God only as personal Law. Not drunk indeed, —but cold and indifferent to our sufferings. Let us always think of him as the great *Heart* of the Universe. . . .

There has been an awful calamity in one of our coal mines, close to that one in which I once owned a share. But the fault is all man's,—not God's. The owners of the mine were too selfish to provide the poor miners with a back door exit—it cost money!

Mill owners used to allow the poor operatives to be burnt up, until the people got their legislatures to make laws compelling mill owners to provide ladder fire-escapes.

Christianity consists in keeping our hearts and minds *both*

awake, to protect the poor, the weak, and the silly from all sorts of harms. There is no other kind of Christianity. . . .

MILTON, *Sept.* 8, 1869. SUSAN I. LESLEY TO HER HUSBAND.

. . . Another letter from M. asks me to lay out a plan for L.'s life [a delicate child] the next year. I answered I could make no plan, let her live like the birds from day to day without plan, and work out her own salvation, *without* fear or trembling. I told her I had no rules and no methods, only believed in surrounding children with good people and good influences, good conversation to which they could listen thoughtfully, seldom joining; never to discuss before them what they should eat, drink or wear, so that their meals should be an unconscious delight and their clothes an unconscious comfort; and for the rest, leave them much to themselves. These are my convictions, growing stronger every year. . . .

PHILADELPHIA, *Nov.* 12, 1869. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . He [Peter] said to me the other night, that although he has had to resign much scientific labor, which was most interesting to him, and though he has to walk a crack, to keep in health and get his living, yet he feels by comparison that he was never happy in his life till now. So much there is in accepting our limitations and working within them. A lesson not to be learned except with years, and dear-bought experience. . . .

Nov. 28, 1869. SUSAN I. LESLEY TO SAME.

. . . Professor Peirce has written him [Peter] a letter of overflowing thanks for his article on the Coast Survey. Indeed, he has now no end of complimentary letters, if that ever did anybody any good. And offers of large salaries for work that he is no longer able to do. And letters from every quarter, asking for all sorts of information, taking time and thought to answer. But he keeps on, in the routine he has prescribed to himself, does what he can, and leaves the rest, the only way. . . .

PHILADELPHIA, *Dec.* 5, 1869. SUSAN I. LESLEY TO SAME.

. . . Peter preached last Sunday for Mr. Furness. . . . I enjoyed hearing him again very much. . . . It was a fine discourse on Paul's journeys, and his meeting with Gallio.

On Wednesday, we had the great delight of listening to Mr.

Sumner, in his great Lecture on *Caste*, at the Academy of Music. It was very magnificent. . . .

. . . On Friday night, we heard Robert Collyer, in the same place, give a lecture on "Clear Grit," forcible and striking, full of stories and illustration, but without thought and scholarship, like the former. Each good of its kind, however, and all the kinds are wanted to suit all tastes. . . . This morning Peter preached for Mr. Thorne [the pastor of an attempted second Unitarian church in Philadelphia]. . . . He had an audience of eighteen souls, including Mary and me. But it was a truly noble sermon; he threw away all notes, and gave himself up to the feeling of the hour. The parallel he drew between the teachings of Hillel and those of Christ was very fine, and his appeals to the old, and stable, and permanent, as the foundation of all progress, equally fine. . . .

Feb. 13, 1870. SUSAN I. LESLEY TO SAME.

. . . On Thursday Mrs. Seiler sent for Peter to come to her house, to see an exhibition of "Musical flames." He went, and was very much interested, but I cannot describe it to you, as it is so scientific. I forget if we have ever told you about Mrs. Seiler, the charming woman, who wrote the learned work upon the Voice, and whose anatomical researches, pursued under so many difficulties, resulted so successfully. She is a very interesting little woman, past fifty, and full of German enthusiasm, as well as a profound student. Peter has lately had her elected a member of the American Philosophical Society, a high honor. At Mrs. Seiler's, by the merest accident, Peter met Mr. Goldwin Smith, who is passing the winter here. . . .

JAMAICA PLAIN, *July* 19, 1870. SUSAN I. LESLEY TO HER HUSBAND.

[Speaking of a visit in Springfield, she writes :] After tea, though still hot as blazes, Carrie and I both started for the Universalist church, to hear Mrs. Mary Livermore, a celebrated preacher. Never was anything like the jeers of the rest of the family,—Dwight thought we were crazy to go out again.—But we went, and were paid tenfold for our trouble.

It was the Centenary celebration of Universalism in this country. . . . Four fine-looking men ministers sat on the platform behind the desk, and in their midst, a quiet woman of fifty, in plain black silk, one of the most attractive-looking persons I ever saw. Her forehead was broad and pure, her eyes deep set

and large, and her mouth, the home of all the benignities. But when she rose to speak, Caroline and I involuntarily clasped hands, entranced.—Her voice, the most musical I ever heard, her enunciation the most perfect. She began, and told of John Murray stoned in Boston, one hundred years ago, for declaring his faith in Universal salvation; she went on to show the growth of liberal ideas, the influence of the denomination, its work, its shortcomings, and hopes of the future. What eloquence! What persuasive power! What wealth of illustration! What flow of language! What utter absence of self-consciousness! There was not the faintest allusion to the woman question, or to her being a woman.—She was the living embodiment of all that is most feminine, yet most strong. Caroline and I felt as if we could have listened to her all night.—In fact, all the other women I have ever heard, Anna Dickinson, Lucretia Mott, etc., fine as they are, pale before her. There is just as much difference as between common orators and Wendell Phillips. Yet I say this not to depreciate them. If you ever have a chance, do hear her.

JAMAICA PLAIN, *July* 25, 1870. TO HER HUSBAND.

. . . Read Ruskin's fine Essay on "Pre-Raphaelitism,"—magnificent! How I wanted to read it aloud with you, and Mary, and Meggie! How impossible to quite enjoy a book without that beloved audience of three!

. . . I sat all the morning in Joseph's room. . . . I read aloud to him, and he to me. In the afternoon I devoted myself to reading Mrs. Farnum, the whole glorious chapter on "Woman in the Kingdom of Uses."

There is nothing finer in the English language, nothing more prophetic, I am sure, in the whole realm of spiritual foresight. I long to have you read it. One-sided as she certainly is, and leaving out of her argument a body of facts that are against her theories, she still opens such a possible, such a truthful and holy career for women, and such a lifting of Humanity through the feminine element, that one cannot but feel conviction on every page. The book never went through but one edition; it is out of print, but I predict that fifty years hence it will be a great book, read and appreciated by millions. . . .

PHILADELPHIA, *Aug.* 17, 1870. PETER LESLEY TO HIS WIFE.

. . . People begin to reappear in their accustomed haunts. Our billiard party at the League yesterday afternoon was nearly

full. The war [Franco-Prussian] absorbs all thoughts. "For the defeat of the Germans [French?], there were great divisions of soul." Everybody has an instinctive belief in German veracity, probity, steadfastness and valor. I shall send you Ripley's admirable *Tribune* letters, and ask you to send them afterwards to Mary and Meggie. . . .

Last evening I had the rare treat of a two hours over the splendid folio of Dümichen, which our old German agent Vogel came and brought himself to the Library (A. P. S.) the other day, and was sorry enough to find me absent,—as I am at the mis-encounter. He could have posted me on Tholuck, Erdmann, Ulrici, and other old friends of mine, for his *Buchhandlung* is at Leipsic. . . .

. . . If the Germans free Europe from the Bony curse—the skeleton in its closet—I will love the "*Muttersprach*" better than ever. . . .

Sept. 3, 1870. To his Wife.

. . . What immense events are transpiring across the water! and we hourly spectators of marches, and listeners to the roar of the cannon, through the cable.

I take it, the French are so ignorant, illiterate, and ill-informed about the rest of Europe, that they *must* overrate their own strength, and keep on fighting. It was a shrewd and merciful move to parole MacMahon, who may appear in Paris, show his wounds, tell his tale, and bring about peace. . . .

Sept. 7, 1870. To his Wife.

. . . What stirring times we live in! But to show you and Mary that they are not exceptionally so, I send a slip upon "*War as the Chronic Condition of Society.*" Why not? Very few—a very small percentage of men ever fall in battle,—in fact, no more than nature provides for the balance of births. War is merely the way men show courage, skill and strength, when they have grown tired of all the common occupations of daily life. It is a great game of croquet, involving enough extra danger to enlist the entire enthusiasm of the Citizen and the Nation.

Yet I remember well when, after this Franco-Prussian War was over, and one of his children complained that the newspapers would lack interest, he exclaimed with a shudder, "Never let me hear you say such a *horrible* thing again!"

Sept. 9, 1870. To his Wife.

. . . I made a summary of the history of the War in France the last three weeks, but it was crowded out of my paper to-day. I will extend it and print it next week. Really, this editorial writing is susceptible of being made of a high order, if the proper intelligence, experience and devotion, be bestowed upon it. I get sometimes quite enthusiastic over it—when I feel right. . . .

In October my father undertook a survey in the neighborhood of Lynchburg and Saltville, Va.,—a trip of much fatigue and exposure, which he seems to have endured well.

In the autumn of 1870 the "Star Course of Lectures" was established in Philadelphia, and we heard, that first season, Sumner, Curtis, Wendell Phillips, and several other great American orators and writers. It was a rare treat.

Feb. 3, 1871. Susan I. Lesley to her Aunt Catherine Robbins.

. . . I had a call from Miss [Sarah] Pugh on Monday. . . . Finding me a good listener on the Reform questions that interest her, she brings all her foreign and home correspondence, and often reads me long letters from Mrs. Josephine Butler, a very distinguished lecturer in England on the Woman Question. Her letters and essays are wonderfully fine, covering the whole ground, and her style and method of handling is delicate, persuasive, religious, and as full of judgment as of feeling.—Of all the speakers and writers on this subject, she impresses me most. Miss Pugh lent me, on this last visit a large English edition of Essays by different English writers, on Woman's Work and Culture, edited by this Mrs. Butler, and containing an Introduction by herself, which is excellent. One essay on Female Suffrage by Julia Wedgwood, and one on the Education of Girls by another lady, are among the finest things in the English language. I am so charmed with the book, I am going to import it, and when it comes, I will send it to you to read. In reading these English women's thoughts, I am struck with the calm reasoning, the dignified assurance, and absence of all heat, the perfect refinement of dealing with the question, which is such a contrast to many of our people.—But perhaps this volume of Essays is a choice collection and does not typify the great proportion even there. . . .

A survey in North Carolina took my father South in February, 1871. He did not much like the South or Southern society, as a general thing, but he writes in a letter to his wife from Norfolk, of February 26, the following words appreciative of Southern life and ways:—

The blacks are a delightful race to have about one, so different from the quarrelsome, querulous, stormy Northern tribes. I love the backwardness of the South. It rests one who is weary with the driving "progress" of the North. So far as I can see, mankind scarcely better themselves with all their boasted railroads, factories and forcing schools. Man wants but little here below, but wants that little *mild*. To plunge into the "long-leaf pine" belt, as I shall to-morrow, is like taking a dip into the sea of the past. As far as that goes, it is like a journey to the interior countries of Europe,—but alas! without catching a glimpse of one old church, old castle, old palace, museum, bridge of stone, fountain, cross, statue, or even one quaint house. Well,—if God likes variety in nature and makes dreary wastes of sands and waters on his planets, we may put up with the lodges in vast wildernesses, and call them American homes.

In the next letter of February 27, from Raleigh, he writes with less satisfaction:—

The people here are very *tall*. That strikes a stranger as much as anything.

The place is a large, beautiful and wealthy village; a capital without bazaars.

The country was desolate enough, from Norfolk to Weldon and Gaston; but became cleared and cultivated on nearing the high bridge over Tar River. But how different from Lancaster County! or Chester County, Pa.! The lovely groves, and lowing herds, and comfortable barns, and scattered villages, which make a garden of our colder country, are [here] nowhere to be seen. Swamp, prairie, forest, log huts, negro shanties, here and there at long intervals an impoverished farm-house, reminding one of City rather than of country life, fill all the landscape, which is flat, and vast, and worthless as its history. Yet even here no doubt the virtues exist, if they do not flourish. The climate is superb. The people might be a mighty race. Perhaps our

great-great-grandchildren will travel here in a garden of Eden. Who knows what Time and God have in mind?

Norfolk has some gems. I was too hasty. A delicious little old cruciform English Church, marked on its gable end 1729 S. P. (St. Paul), and quite a superb florid Gothic catholic cathedral, in the style and almost as fine as that in Pittsburg. . . .

PHILADELPHIA, *April* 6, 1871. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . I have much more to write about, but I cannot now. I had a sweet letter from Lady Lyell a few days ago. She and Sir Charles were staying with Darwin at Beckingham, and she sent me an English primrose and violet she had just gathered out of doors, among the first in bloom. She said that Sir Charles and Mr. Darwin were having long and interesting talks together, but that they should return to London in a few days. They were all delighted to get the news of the discovery of the Bone Cavern in Pennsylvania. You can read Peter's account of it in the April Number of *Old and New*. . . .

In April my father went into Tennessee on a survey.

WASHINGTON, *April* 6, 1871. PETER LESLEY TO HIS WIFE.

. . . This architecture is grand in material and in massiveness; classically fine in form, but cold for want of thought-suggesting ornaments. The long frieze of the Treasury, with its thirty columns—one of the superb colonnades of the world—has not even a rosette or a garland to arrest attention, and refresh the eye. I never appreciated so well the metopes and dentals of the Doric entablature. The west front of the Treasury is splendidly broken up and massed, but as plain and uninteresting as a Quaker meeting-house. . . .

CARYSVILLE, NEAR KNOXVILLE, *April* 10, 1871. TO HIS WIFE.

. . . Every geological problem presented to me for investigation awakens an interest as fresh as any that preceded it. I hope it will always be so. But I am very feeble, and a little extra exertion affects me, as it never used to do. Still, I can do some hard work yet; and long experience gives me (as you often say, when I forget it) the power to see quickly and execute rapidly. . . .

My mother and her daughters spent the summer of 1871 at a small hotel on the summit of Broad Top Mountain in Central Pennsylvania. Here she rejoiced in the fine pure air, and the society of a few pleasant companions, who, like herself, sought health and strength on these mountain tops.

BROAD TOP, *June* 22, 1871. SUSAN I. LESLEY TO HER HUSBAND.

. . . I came from Dudley, in the little rockaway, with a man named Swope, who said "he knowed you like any think, he follered you over these yere mountains, and allowed you knowed these yere mountains every inch on 'em." . . .

June 23, 1871. TO HER HUSBAND.

. . . I like this place more and more, it is so peaceful and lovely, and all the people and servants are so kind. After all, in the best of our American common people there is far more real kindness and sincerity than in the obsequious foreign servants. It is pleasant to meet people on an equal footing.

. . . I told Sally, the maid, that I had sent to Philadelphia for a round comb. "Lors, my dear," said she, "Broad Top ken afford ye a round comb, if it can't nothin' else." . . .

BROAD TOP, *June* 25, 1871. TO HER HUSBAND.

. . . At noon we saw a miner's funeral pass the house, it was almost as touching and picturesque a sight as funerals I have seen in Pau. First came a long cart with two horses and rope harness, the driver walking alongside. In the cart were the family of the deceased, sitting on boards, and the coffin a rough pine one. Two of the children sat on one end of the coffin. Quite a long procession of men and women, two and two, walked decorously behind the cart, and I was thinking how simple and sweet a funeral it was, when the voice of our city boarder behind me said hardly, "why this is worse than the Negroes in the South do these things—they always have a hearse, and at least *one* carriage for the mourners." . . .

In a letter of July 5, 1871, my father mentions having to prepare my "Geology of Pennsylvania for Willing's maps."

PHILADELPHIA, *July* 21, 1871. PETER LESLEY TO HIS WIFE.

. . . Yesterday I dined with the Tyndales. . . . He [General Hector Tyndale] has lots to tell, especially about his cousin John

Tyndall, the professor at London, who wishes to come to America to lecture, to show his gratitude to the Americans for their appreciation of his works: His report of what Tyndall told him of my speech at the Royal Society Dinner, some years ago, amused me extremely. . . .

BROAD TOP, *July* 22, 1871. SUSAN I. LESLEY TO HER HUSBAND.

. . . I have been reading John Bost's little account of the Church and Institutions of La Force. Now that there is so much interest felt in this country for the French, how would you approve of my trying to raise a little money for him, among our friends, to send to him before winter? I might write to James Freeman Clarke, to Edward Hale, Rufus Ellis, Mrs. [Walter] Baker,—speak to Mr. Dulles and some Orthodox friends, etc. But I am not sure about doing it, certainly not without your approval. I see that John Bost has always had large contributions from Alsace, which are now cut off, and that he has in other ways suffered from the war. It would be pleasant to me also to send the money, if I collect any, through the old Pastor Bost and his wife, who now reside in La Force, because it would give one happy day to their old age. . . . Tell me what you think. . . .

To which my father replies, July 24, "I do not see why you should wish for my approbation in so worthy a work as collecting for Bost's asylums. I will co-operate with you to the extent of my ability."

These asylums for incurables, which had been established and carried on by Pastor John Bost in the south of France at La Force, Dordogne, had been visited by my father in 1864, and seen to be most worthy of support. The Franco-Prussian War had cut off many of the usual contributions which Mr. Bost could depend upon for the carrying on of his work, so that my mother's effort came at a very opportune time. She at once went to work, and wrote many long letters to the friends above mentioned, and by winter she was able to forward to Mr. Bost several thousand dollars, which tided him over that difficult season. In later years my mother collected much money for objects which she or her friends had at heart. She was very successful in this work, and used to attribute her success to the fact that she

very carefully selected the persons proper to be asked for a given cause, and that she almost always *wrote* to them, and in writing made it *easy for them to refuse*, and she usually asked for a definite sum.

She had a horror of becoming a professional beggar. She knew that it was possible for the character to deteriorate under the stress of continually demanding aid of others, even for the most worthy objects. And she guarded herself from such deterioration, even when most desirous of gaining some charitable end.

BROAD TOP *Aug.* 8, 1871. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . Since you left, Peter has had a very touching letter from John Bost, his situation since the war is a sad one.—Don't be put out with me. I begged Peter to leave all that matter in my hands, and I would make a collection for him before October. On Monday evening, after Mr. Dulles had read the service and hymns, I asked if I might read to the group in the parlor a little narrative, and I read John Bost's story. You might have heard a pin drop.—They gave me twenty dollars.—This was a start. On Monday, I made an abstract of it, added a little formula of my own, and as often as every other day I send one off to one of my numerous friends.—It is only by writing to a *great many* persons, that one can hope to gather here and there a little. I make a vow to myself not to exceed a certain amount each day, and not to omit my afternoon nap, or my walks on the piazza. I have headaches when I do nothing at all, and I don't believe it will hurt me. I send by this mail thirty-four pages to James Freeman Clarke, and the same to Edward Hale.—To-day I have thrown aside the whole thing, for rest, but to-morrow I hope to send a manuscript to Henry Ward Beecher. . . .

PHILADELPHIA, *Aug.* 6, 1871. PETER LESLEY TO HIS WIFE.

. . . Congratulate me. I have accomplished one of the prettiest maps you ever saw, and did it all since breakfast to-day. It is now five P.M., and I am not at all tired. It is an Indian ink *bird's-eye view* of the Valley of the Castleman's River, with all the coal and limestone beds running around the hill slopes. It is a beauty. I didn't know I was such a genuine artist. And I work more rapidly than ever I did in my life. To-morrow I

shall write my report, and get the whole affair off my hands and mind. . . .

In October my father again went South into Maryland and Virginia (or Tennessee?).

In October a severe loss came to him in the death of his old friend James T. Hodge, drowned in a storm on one of the Great Lakes. My mother writes of him: "One of the best and wisest of men. Peter had a letter from him only a day or two before he sailed on the ill-fated steamer. He is an immense loss to his family and his friends and to pure science."

And in August, 1871, my mother's brother, Joseph Lyman, died,—a great sorrow to both my parents. To my mother he was most dear, and she writes:—

Aug. 18, 1871. SUSAN I. LESLEY TO HER HUSBAND.

I have just written to Susan [Bulfinch Lyman] as if he had already gone. I had a most vivid dream of him, Saturday night. He waved his hand to me with one of his most radiant smiles and said, "It is time for me to go!" I feel perfectly calm and peaceful about him, but absorbed in him. My heart follows after him. Never was more entire love between brother and sister. . . . I have others dearer and nearer than he, but of all the World I only understood him.

Aug. 27, 1871. PETER LESLEY TO HIS CHILDREN.

. . . It was a very great satisfaction to me that you were in Roxbury just when you were, and that Mary was present at her Uncle's funeral. I loved him dearly, and have abundant evidence that he loved me. Our mutual affection lasted more than twenty years, for I was his guest for several months in 1848 or 1849, I forget which, before I saw your mother. His memory leaves nothing but sweetness and comfort. He was one to whom no epithet but *Nobleman* will apply. Let our lives be always noble like his. To act nobly is worth more than to live happily. Remember that. It is your good fortune, dear children, to come of a noble race of men and women. Be proud of it. Be worthy of it. Avoid the least suspicion of deceit. The noble soul needs no concealments. Like a celestial planet, it moves along its orbit full in the view of all mankind. Its motto is not "Honesty is

the best policy." Oh, no! Leave such a motto to vulgar minds. Its only motto is *Noblesse oblige!* As Luther said before the Council at Worms, "I can do no otherwise." We have two kinds of enemies only: those who would *persuade* us to do wrong, and those who would *compel* us to do wrong. Our only defence against both hosts is this: *Noblesse oblige.* I am of noble descent, I *cannot* do a meanness. This is that glorious "Liberty of the Sons (and daughters) of God." "Do with me what you please, as for me, I shall always tell the truth and live nobly. I cannot do otherwise. Your love is worthless if you make it an instrument for my dishonor. Your threats are vain, your authority I repudiate, if you wish to degrade my noble birthright." Let this be your answer to everybody, *everybody.*

God bless my beloved children.

Jan. 16, 1872. PETER LESLEY TO HIS BROTHER ALLEN.

. . . I wish you were here to go with me to see Sothern. "Lovely suffewah!" has become the password of the family. . . .

Do get "Theobald, the Icelander," by Fouqué, and read it to Jennie. It is as exquisite a romance as "Undine," and is without its supernatural elements, or nearly so. I must confess to a growing love for the romantic. I am sick of the Bessemer steel discussion, Mrs. Wharton's trial, Fisk's Murder, the Civil Service imbroglio, Alabama Claims, *et id omne genus* of commonplace events. It's quite a relief to hear that all good telescopes now plainly see Sirius' moon. That opens up a new field of conjecture and fancy.

But even the heavens are invaded by these materialists. The glorious sun is gossiped about in the most disrespectful fashion, and is turned about, and summed, and measured, like a fine lady in a milliner's establishment. The last opinion is, that Say is right in his argument that the orb is only gas. Its Specific gravity being less than 1.50, and its size, as compared with all the planets together, as 350 to 30 (or thereabouts), nothing remains for it but to be accounted a sort of floating *ignis fatuus*, like that which you once so finely described to me as meeting you at midnight in the St. George's marshes. I must now return to my editorial on the Reading Railroad Report. . . .

GREENSBORO, N.C., *Feb.* 16, 1872. PETER LESLEY TO HIS WIFE.

. . . To-day I am all right and jolly. So I have had my Sabbath devotions, choosing for the lesson of the day the entire

book of Solomon's Song, as being more suggestive to a fellow in my situation than another part of either the Old or the New Testament.

Susie dear, there is something very deep in that said *Canticus canticorum.* It is not a whim of the Church to enclose it in the Canon. There is a vein of mystical thought running plainly through it, which removes it high above all vulgar criticism. It is not at all an Anacreontic. You may rely upon that. It has a very Egyptian *tournure,* but is Hebrew also. The mention of the Pharaohs in it shows a reference to Egypt. But any one who has dabbled in the Nile literature as much as I have, must recognize the color of the water. On the other hand, it is quite in harmony with those strange love songs of the Persian mystics, of an age much later than Solomon (perhaps). I am convinced that the fathers of the church, who knew much more about the Gnostic Mysticisms of both Egypt and Persia than we do, felt themselves perfectly justified in accepting it as a part of the standard literature of theology. There are divine expressions, and celestial suggestions in it. And its tenderness equals its elevation.

It is nowhere sublime, but it is often very exalted. Certainly Solomon never wrote it. But some very choice spirit of a later day did. I suspect it was written by some Hebrew at the College of On near Cairo, who remembered his home within sight of Hermon and Lebanon, and his annual festivals at Jerusalem, with heart-sickness. Perhaps it was written by one of Solomon's charming Egyptian beauties, for there were glorious women bred in the palaces of Memphis and Thebes, and Shemite blood was largely intermixed with Coptic, from the XVth dynasty downwards.

By the way, in one of Chabas' papyri, "Complaint against a malefactor," p. 1900 not dated, but containing the name of Sete Meneptah, grandson of the Great Rameses, and the Pharaoh of the Exodus (as all agree),—we have the nearest approach to the Hebrew Bible name Mosheh (Moses) of any yet found. . . . .

In March and April my father took a trip into Eastern Tennessee.

EMBREEVILLE, PLEASANT VALLEY IRON WORKS, E. TENN., *March* 31, 1872. TO HIS WIFE.

. . . And *such* a pleasant Valley! I wish, my dear Susie, I could have you transported hither through the air; not leaving Mary and Meg behind,—far from it. They would be in heaven

upon earth, as I am. And so you see what a lesson again the last 36 hours have taught me; a lesson I have learned a hundred times and as often forgotten; that no one knows what a day may bring forth. The evening of Friday I wrote you rather a dolorous epistle. That night I slept poorly enough. But the morning came, and all the zephyrs had been hired to make it the loveliest morning of the year. A balmy air bathed the body and the soul in happiness. Mr. Bradley came to apologize for having left me in a tavern; but his wife was ill and in trouble. Young Mr. Goodrich came again, and with him two good saddle-horses. My traps were transferred to the depot to be brought after us in the metal wagons. Our ride of 8 miles was over a succession of lovely hills, between farms and through woods. At last we descended upon the north bank of a broad and beautiful river, issuing from a vista of mountains. The Nolichuckee flows between fertile bottoms, at the foot of precipitous mountain walls, of limestone, at first, then of grandly ribbed masses of sandrock and gneiss. The Furnace blazed on the opposite bank above, the village houses stood in long lines along the road. Curious islets of rock rose from the river, half a mile in front of us, restricting its channel. A natural fall fed a natural canal, leading from the great pool above to the numerous water-wheels of furnace, saw-mill, ochre mill, etc. A rope was stretched from rock to rock, and a ferry-boat took us, our horses, a metal wagon and its horses, and travellers across. The most generous and elegantly furnished mansion received us. Two fine college-bred brothers of my companion welcomed me like gentlemen. Their father came out of his sick-room to welcome. Their mother, a southern lady married in the north, welcomed me. A capital dinner followed. Then we sauntered round the premises, examined the works, and took a lovely walk up the river, on the opposite side of which rose a vertical wall of horizontal sandrock outcrop. They kept me talking incessantly. We talked at supper-time. We talked until ten o'clock. Everybody was in the best good humor. They put me into the best room, with a lovely wood fire, and into a bed as was a bed, assuring me that I need not rise until eight o'clock.

. . . Sunday broke, glorious, mild, balmy, peaceful, as if winter had been but a midnight dream. After a good breakfast, and a play with the new setter pup, just expressed from Annapolis to one of the "boys," and another long talk with all of them, I turned in to write. But pshaw, who could write under such circumstances? I panted for free action in the open. I

whittled a stick into a Jacob's staff, mounted my compass, slung my note book satchel, and sallied out alone. All the morning I amused myself with making a complete plan of the Works and its surroundings, and returned to a nice dinner. Now I am alone, but I shall take another run before supper, unless the gathering clouds drop down their fatness. The exceeding—rare—beauty of this scene cannot be described. It has elements of the picturesque which I have never met with elsewhere.

A dear friend—Miss Harriet Ware—has lately sent me the following verses, which I print as indicative of my father's cheerful mood at this time. She writes: "I have this moment come across these lines which your father wrote to me . . . in May, 1872. I was staying at Clinton Street, and gave him, as you see, a cup and saucer for his bread and milk."

My cup a little goblet is;
  My verse a little couplet, too.
That I will fill with milk; and this
  With compliments to that, and you.

Cupio talem oft I've said,
  When such a cup I chanced to see;
But no one else was so well bread
  To couple thus my milk and me.

Thin as a Wafer! and so light!
  Of finest Kaolin its clay!
Its dainty shape! Its perfect white—
  'Twill scorn I fear my strong black tay.

Coffee would make it blush as red
  As blush the roses round its rim.
'Tis sacred to Passover Bread,
  And, if the Gods vouchsafe it, Cream.

Long may the rose and lily, wed,
  Flourish around your own cup, dear!
And late the dark Cupressus shade
  The lovely lips that linger there.

L.

CHAPTER XXV

University Work

In the spring of 1872 my father was appointed professor of Geology and Mining Engineering in the University of Pennsylvania, where he had held a professorship of mining since 1859.

In 1872 the University moved from its old buildings in the heart of the city, into larger quarters in West Philadelphia, where there was space to develop with the growth of its various departments. The Scientific Department was now put into efficient condition, with suites of class-rooms and laboratories, and a full corps of professors. Not long afterward the department received a large bequest from Mr. John Henry Towne, and took the name of the Towne Scientific School; and at that time my father was elected Dean of the school, which, of course, added greatly to his labors.

He plunged at once with enthusiasm into the work of organization. This, added to his lectures and technical instruction, occupied the greater part of his time. But certain hours had still to be devoted to his newspaper, which he continued to edit for another year or two; and he had always the usual amount of proof-reading, correspondence, and general supervision of the American Philosophical Society library, incident to his position of secretary and librarian.

That he was now able to carry on these various occupations with efficiency, showed a more complete return to health and vigor than could have been hoped for five years before.

As dean of the Scientific School, he had a large correspondence, and I find a mass of letters from parents of students and from prospective students themselves; a great many letters concerning the acquisition of books, geo-

logical, mineralogical, and palæontological collections, implements for drafting and surveying, etc., for the proper equipment of his own department; to which of course was added much correspondence in regard to care for and equipment of the other departments, and a just apportionment of the funds available for such purposes.

He had great enjoyment in this new opportunity of teaching. He had definite theories as to education, and loved the profession. I do not suppose that he was much of a disciplinarian, but he could inspire enthusiasm in his pupils, and could fill them with a desire to work. He was no stickler at trifles, and passed over without comment small derelictions in manners. A sense of humor carried him by many a boyish prank which he saw held no real disrespect or ill intention. Thus he was not depressed by his association with the young, as many instructors are. He did his work with enthusiasm. He expected the boys to feel a like interest. If they did not, it was their affair and their loss. He regretted it, but was too busy a man to brood over the matter.

As a preliminary to the organization of his department in the University, he spent some time visiting other schools in the East, observing and studying their arrangement and equipment.

There were among the corps of professors a number of old friends, chief among these Professor John Frazer, the distinguished physicist, for whom my father had had for years the deepest affection. A large share of the satisfaction which he felt in undertaking this new work was in his expectation of more constant association with this friend. But only a short time later befell the sudden death of Professor Frazer, and the early months of my father's first season in the University were darkened by this grief.

BROOKLYN, *June* 6, 1872. PETER LESLEY TO HIS WIFE.

. . . I found Bein* in his office; he showed me wonderful things. My Virginia sketch map will be satisfactory. Göm-

* Julius Bien & Co., lithographers, New York. Much of the beautiful illustrative work of my father's geological publications was done by this firm.

bel's Bohemian Geological Atlas is a marvel. Bien is imitating it in his enormous publications for Whitney, King, Hayden and Brooks, extending through years. He showed me a MS. Foolscap note book of a student of Columbia College, full of the professor's mechanical drawings, fac-similed, 300 bound volumes of 94 pp., for $400 only. I shall make my boys report my lectures and print them in fac-simile to spur them on.

At one o'clock I took 4th Avenue cars for 49th Street. . . . Prof. Day took me through the Scientific rooms [Columbia University].

Found President Barnard writing his report. . . . Barnard then took me up to Joy's geological room. I found there folding blackboards, and sliding diagram frames. . . .

BOSTON, *June* 7.

. . . Found Pickering and Runkle, but saw little, and learned less. . . .

June 8.

. . . Took a carriage to the Hillards, and thence to Black's, the Arctic photographer; thence to the Institute of Technology. Spent three hours in the different rooms, drawing plans and taking prices, under Mr. Fogg, who has done most of the work. Talked with Runkle; and Genth arrived from Cambridge, and Prof. Nichols; and Prof. Watson, Runkle, Genth and I went again over the lower metallurgical, chemical and physical rooms.

BOSTON, *June* 9, 1872. TO HIS WIFE.

. . . Went at 9 o'clock to the Revere House, and talked with Genth until one, when we strolled round Washingon St. and up to . . . North end of Bowdoin St., where we dined privately with Wolcott Gibbs, his wife and nephew, and talked until four o'clock, when I came away. Seven hours of continuous conversation is an extravagance I seldom commit. But there is so much to consult about. . . .

To-morrow I must spend in Cambridge, with Shaler, and Gray, and Alex. Agassiz. . . .

. . . This Boston world is so full! At last however I regard Philadelphia from a distance, with something approaching a genuine affection. . . .

BOSTON, *June* 9, 1872. TO HIS WIFE.

. . . At the Museum of Comparative Zoölogy, I found Prof. Shaler, very glad to see me. Told and showed me how he

bought; his boys' note books; his cases, etc., etc. His plans for a great book on Brachiopoda; his cards, and how they are photographed and then albertyped in New York. His next summer's (this) expedition down the Tennessee River; his last summer's expedition through Pennsylvania, etc., etc.

He took me through Cooke's beautiful laboratory. Through Cooke's mineralogical museum, where I saw for the first time a plate of *thurium*.

Then Jeffries Wyman took me, and for two delightful hours showed me all his Florida and Alaska rarities, the unit of ornamentation a cuttle-fish arm, the narrow-shinned men of the shell mounds, proofs of cannibalism, a gorgon's head from Mexico, and told me all about his expeditions. . . .

In a letter of June 24, 1872, from my mother to Miss Robbins she says:—

Peter came home very much tired by the excitements of his Eastern trip, although he enjoyed it extremely. I am so glad you wrote him as you did, and held up —— —— as a warning. I think he does try very hard to keep within bounds. But it is a very different thing to organize a new scientific school, and arrange for it, from what it is to step into a Professorship already long established. And especially, when he is the only one who knows what the requirements are, and feels that mistakes made now will be so hard to rectify hereafter. I cannot help feeling the deepest solicitude about him at times. Still I try not to be over-anxious. I think that he is conscientiously desirous to save his health, and in many ways has learned a great deal in regard to it. This occupation, when fairly under way, will be very interesting to him, and we will all do our best to help him in his other work. . . .

[PHILADELPHIA], *July* 30, 1872. PETER LESLEY TO HIS WIFE.

. . . Last evening Prof. Jackson came, and broke my head, and almost my heart, with the terrible Roster. It reminded me of the juggler's trick, of keeping six balls and four dinner plates in the air at once. I shall only have eight hours' teaching a week, which won't answer the desired ends of Science at all at all. [I believe he got twelve hours by the time the sessions opened.]

PHILADELPHIA, *Aug.* 25, 1872. PETER LESLEY TO HIS BROTHER ALLEN.

. . . I would go at once to you, if I were not tied fast here by an influx of candidates for the scientific examination, September 16th next. I had six in a string this morning. They made me Dean of the new Faculty, and it has made me a prisoner in the city ever since.

. . . I am as busy as a bee, writing and reading for my *R.R. Register*, and my future lectures. I am very ignorant in Palæontology, and am coaching up out of Pictet. I am also publishing my survey of S.W. Virginia, with a map, and 20 woodcuts. All the first edition of our No. 88 Proceedings of the American Philosophical Society was burnt up in the fire in Dock St. and I have had to get out a second edition. Proof-reading of genera and species of fossils is *der Teufel*. But proof-reading Mr. Price's metaphysics is worse, for want of interest; and proof-reading of Chase's and Kirkwood's Astronomical Calculations is *der teuflest* of all. What a lot of rubbish I have shot into my soul first and last! But the good Lord will not be hard on me, seeing I did not hanker after it, and would gladly have escaped it.

I am about to publish my report to the Harrisburg and Potomac R.R. Co. on the South Mountain iron ores. It goes to press to-morrow. The map I must send to Bien in New York.

. . . In sheer desperation last week at the intolerable heat, and over-press of this sort of trash work, . . . I laid everything aside, and got down into the parlor my Egyptian books. Three days I worked away, and late at night—to 11 and 12 o'clock,—a thing I have not done these twelve months. It didn't hurt me a bit. There is something immortalizing in that old literature. I even wrote a jest of a poem, called "Nefer the Architect," which I will send you to laugh at; but you must return it. It is only half polished up, and I lost interest in it, as soon as my taste for work came back. I have got down now in my MSS. to section 431; or to Raneferareka, 4th King of the Vth Dynasty. I have several kings of the Vth, and the whole of the VIth to do. It will take me another year or two, for oftentimes months pass without my being able to look at it. . . .

This was for years his chief relaxation. When worn out with daily routine or constructive writing, he would fly to his Egyptian books, and forget all care in the society of his loved cartouches and the long procession of the dynastic kings.

PHILADELPHIA, *Aug.* 25, 1872. PETER LESLEY TO HIS WIFE.

. . . Yesterday I worked hard all day from 8 o'clock to 5. You know it is my only leisure day. Nobody interrupted me. I read proof of 7 papers of Cope. He has discovered *wonderful* animals in the Rocky Mountain rocks, a hog got up with exceptional teeth to live on turtles; elephants with *horns* besides their tusks; a dinosaur in the coal rocks, etc., etc. . . .

FRANKLIN, N.J., *Sept.* 9, 1872. TO HIS WIFE.

. . . The Geology [here] is of the highest difficulty and interest.

I have just discovered a *moraine* which crosses the Valley at Ogdensburg, two miles south of this. All the rocks are grooved and striated, and glacial drift and boulders rest on the tops of the mountains. . . .

Letter to his brother Allen of about this date:—

. . . On the 11th, the trustees are to invite 500 guests to a reception in the chapel at 2 o'clock, to hear five little speeches, of which the provost makes one for his faculty, I one for mine, Cad. Biddle, as Treasurer, one financial, Judge Ludlow one forensic, and Dr. Morton, one ecclesiastico-æsthetic, apropos of the painted windows. In the evening, 200 guests to a banquet in the boys' hall.

I dread these little speeches, and I especially dread our incompetent newspaper reporters. The Provost will no doubt have his in print before it occurs to him what to say; and so perhaps shall I.

I wish you and I could wander for a month or two through Europe, in this superb autumnal weather. . . .

. . . I suppose Mann sent you also his pamphlet proposing a metric system based on $\frac{1}{500000}$ the polar diameter of the earth. It is amazing that an old man should find any interesting occupation in such a scheme, or rather that he should bore the public with its details, for one sentence "Unit of measure = $\frac{1}{500000}$ earth's polar diameter" tells the whole story. No doubt he would express the same astonishment at my MSS. of the six early dynasties of Egypt. But then I enjoy the discussion of thousands of curious facts, and questions, various but allied, and I do *not* bore the world with my private amusements and recreations.

I have ordered Lauth's "Manetho" from Munich, and hope soon to see a book, from which I anticipate (if I can only find an hour to open its pages in), great pleasure. I am told that Eisenlohr has just translated at Heidelberg, the grandest of all known papyri—the Harris papyrus, which I had the pleasure of examining at Alexandria in 1868 . . .

PHILADELPHIA, *Sept.* 28, 1872. PETER LESLEY TO HIS BROTHER ALLEN.

[After thanking him warmly for one of his sketches sent as a birthday gift, probably:] I sometimes dream of days when I shall dream away life with pallet and easel, and vary the dream with verses and music. I am fifty-three years old, and have worked quite as much as the divine justice or human philosophy commands; nor have I any prejudices in favor of "dying in harness," "wearing out instead of rusting out," and all that gentle cant of the conscientious and useful class of people. But habits become our masters, and I who have lived a life of extraordinary liberty, always doing what I pleased as I pleased, am now fettered, and shackled, and ruled, and regulated, as I never expected nor intended to be. The consolation is to be found in supposing that I give to others what I lose myself. But the desire of a still more perfect liberty, that which Jesus promised, and Emerson inculcates, and Confucius stated, and Sakyamuni exaggerated to the infinite,—the liberty of living not for work, but for the sake of living, free from times and places and persons and things, while respecting, honoring and loving all persons, places, times and things;—this desire *to be* rather than *to do*, grows and burns within me more and more. Some men are born to be fruit-trees, potato soil, guano, steam-engines, light-houses, books, etc. Others are born to be columns, statues, unused waterfalls, rainbows, obelisks, fireworks, Æolian harps, coach-dogs, humming-birds, things to look at, pleasant objects, filling up and rounding out the world. All are equally useful, if innocent and temperate. . . .

In October, soon after the opening of the University, the sudden death of my father's old and dear friend, John Frazer, professor of physics, occurred, as mentioned above. They had been constant and intimate friends for many years. My father's greatest social pleasure had been the informal Sunday evenings (already described) at Professor Frazer's house, which he seldom failed to attend whenever he was

in the city. My mother writes of Professor Frazer: "He was a man of splendid powers. His loss is an irreparable one to his friends and to the University."

PHILADELPHIA, *Oct.* 14, 1872. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . On Friday the Inauguration [of the University] went off splendidly. Your father spoke beautifully. When he stood up, he was greeted with the only applause given to any one. It greatly surprised and moved him. Afterwards people walked about the building in groups, delighted with all they saw. Prof. Frazer was everywhere, so genial and kind and full of warm congratulations. . . . On Saturday I sat writing, . . . when your father stood before me pale and breathless, . . . gasped out, "Prof. Frazer has fallen dead in the hall of the University. Oh, go quickly to his poor wife and daughter before they bring his body home." . . .

To-morrow we attend his funeral at Laurel Hill. The University is closed for three days, on account of his death. He is an unspeakable loss, and the reaction from Friday is sad indeed. . . .

PHILADELPHIA, *Oct.* 27, 1872. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Last Sunday Mr. Ames* preached to us beautifully on nearness to God, a devout and strong appeal. In it he said, "Margaret Fuller says that the object of existence is 'to grow.' Mr. Abbot says that it is 'to perfect one's self.' But *I* tell you, if you are not growing towards God, if you are not perfecting yourself after the Divine likeness, your growth and your self-development are low and earthly and unworthy of immortal souls. Salvation is a good word, it means a soul saved for God's purposes, and living with him." . . .

. . . You can't think how bright and happy he [your father] seems—so pleased with his boys and all of them so bright and interested. He is extremely amused with his having entirely lost the name of Lesley. First it was Professor, all the time, but of late they seem to have ascertained that Dean is a higher

* In September the Rev. Charles Gordon Ames came to Germantown to take the pulpit of the Unitarian church. It was the beginning of a deep friendship for my parents, one which they felt as a blessing to the end of their days.

title, so students and professors always address him now as "Mr. Dean." . . .

Nov. 6, 1872. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . His work at the University looks like a marked success, but he has literally to drive the students away, when hours are over, and now they are clamoring to work afternoons. He stood lecturing yesterday four consecutive hours, without a moment's let up, and strained his lungs so that he could not speak aloud all the evening. . . .

PHILADELPHIA, *Nov.* 17, 1872. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . Oh! how many lives I have lived! I feel *so* old sometimes. So many chapters ended, so many stories finished, so few records left behind. Yet that is not the right way to feel.—One should look back over the past, as over so much accumulated treasure; and all that is gone from earth, as garnered in heaven. —But it is not always easy to do so.

We have been over-busy of late, with Prof. Tyndall's lectures, and many extra calls on our time besides the usual ones. Peter is not sick, and still keeps all his trains in motion, and possesses his soul in peace and patience. . . . But I never saw him look so thin and worn. . . .

. . . We have been to three of Tyndall's lectures the last week, and have three more this week.—They are intensely interesting, his manner is captivating, he is brilliant in experiment and very clear in explanation. We dined with him at his cousin's, where he stays in this street, the day he came; and Peter has dined and lunched with him twice since.—He is very simple and cordial. . . .

BROOKLYN, *Feb.* 9, 1873. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . I left home last Tuesday afternoon with Peter, who came to New York to the Tyndall Banquet. . . . Tyndall, who passed the previous week at his cousin's opposite us, in strict incognito, came over to see me and begged me to accompany Peter [to the banquet]. He assured me that Mrs. Agassiz and ten other ladies were to have a room for meeting adjoining the Banqueting Hall, and when the dinner was over, were to be admitted to hear the speeches. . . . We reached Delmonico's before six, Peter placed me in the anteroom arranged for the

ladies, and went to his friends. I was tired from my journey, and as no ladies had come, I curled up in the corner of a nice sofa in a retired corner and fell asleep, only rousing now and then to hear the buzz of voices from the hall, or an occasional shout of laughter. At 8 o'clock, a waiter brought me a cup of coffee and a roll. At half-past 8, about ten ladies came in, wives of professors, some of whom I knew; and at 9, Dr. Youmans came to conduct us to the sofa, at one end of the Dining Hall, where we could sit and hear the speeches.

It was a very great disappointment to all that Mr. and Mrs. Agassiz were not there, but the Legislative business prevented Agassiz from coming. As you have probably seen the accounts of the speeches in the papers, I will not enlarge upon them. Mr. Evarts' was very fine, so were Draper's and Barnard's, though poorly delivered; and the very best of all were the two closing speeches that were not reported at all, from President White, of Cornell, and Dr. Bellows. Tyndall's own speech was good and closed with feeling. It was 12 o'clock when we left the Hall. There was a great meeting of friends in the anteroom, and Peter was glad to greet Prof. Hall of Albany, and many of the Yale men, and others. . . .

. . . On Wednesday morning, we met Tyndall at breakfast at the Brevoort House, parted from him with sorrow, and then Peter returned to Philadelphia. Tyndall said his coming here had been a grand success, he had nothing but kindness and consideration to remember. . . .

PHILADELPHIA, *March* 5, 1873. PETER LESLEY TO MISS CATHERINE ROBBINS.

. . . I have not written to you for so long that Tyndall has come and gone. What a nonpareil in science he is! The more I know of him, the more I feel his perfection as a type man of science. But what makes him that, forbids to him those charms of lovely imagination which hang like golden clouds over the solid earth, and rich harvests of physical science. I miss in him the inexpressible *insouciance*, the naïve enthusiasm, the rich and vigorous sentiment of Agassiz, who remains my beau-ideal of the man of science. Agassiz fulfils *all* our demands. He is true, precise, learned, original, poetical, sympathetic, genial, inspiring, doctrinal,—all by turns—all in one. Few such creatures are made, or grow. The earth shines with their light, is warmed with their fire, blossoms and bears fruit at their command, and grows dark when they die. . . .

March 6, 1873. PETER LESLEY TO MISS ROBBINS.

. . . I greatly enjoyed my lecture to the Sophs. to-day, on the contrast between God's immutability and the infinite variety of change in the geologic history of the earth. They sat like one great eye and ear, for an hour. My working Juniors and Seniors also are a great comfort to me, and are already showing the qualities of good geologists. . . .

PHILADELPHIA, *June* 21, 1873. PETER LESLEY TO HIS WIFE.

. . . Well, such a week as this has been, is a curiosity in biography. I cannot pretend to give it in detail. Suffice it [to say] that all the compresses life can put on a mortal's soul, seemed to have been "exhibited" by the Great Physician in prescribing for my case. Much obliged to him, all the same.

Henderson and George have been superadded to it all, to my great delight, dismay, distress, distraction, and enjoyment. *Vous comprenez?* It is better now, for they have fallen into their own ruts and appreciate the situation. I begin to take a hearty satisfaction in their visit. But why must the care of *all* the churches come upon Paul?

I examined classes for two hours Tuesday, Wednesday, and Friday. At the end of Thursday A.M., down town, I had averages to make up, examination in the hottest room in the building, under the roof, in the hottest day of the year, and at 12¼ without food, entered the Faculty room, to preside at a stormy session for 4½ hours, after having met a committee, and made a report, and presided at an executive committee, at which I had to judge and discipline 3 students. At 5.30 I got dinner, and found people at home waiting for me to discuss matriculations. At 11, I got to bed, after a discussion of George's future with Henderson.

Friday was spent in editing my paper, making up reports, examination from 12¼ to 2¼ and faculty meeting of the most exciting character—a perfect babble until 4½ P.M. Found Henderson at tea, wrote up my society papers, and played secretary until past 10 o'clock, at the meeting, at which I was compelled to defend myself against a violent attack from C. and his Quaker friends whom he had summoned to support him. . . . I walked home fearfully excited, having spoken six or seven times, and waited up for Henderson, (who had gone home with Rushenberger) until 11½ o'clock.

To-day, I had to try to make headway on my poor map of Caledonia, and at 12 went down to do essentially necessary

things at the Library. There, had a terrible talk of an hour with ——, who is in great trouble, and relies on me to help him. Then with Pemberton, to arrange for a hunt on St. Paul's Island, in the Gulf of St. Lawrence in August; then Stokes and young Harden, who gave a report of the boys' expedition (a success); and Platt who negotiates for two new surveys this summer. I had a consultation of an hour with Mr. H., teaching him what he could not see in the anthracite map for my report to Alexander and Co. William, Dyke, Chase, etc., etc., not one line did I write. Patterson came to know why I had not helped Mrs. Peale select out her husband's arrow-heads for archæologists in Germany; and Chase, to effect a compromise about Cope's *Educabilia* paper.

I am about to take tea at the Chase's with Henderson.

To-morrow I *must* finish my Caledonia map.

Monday, the examinations for candidates commence, and I must prepare my speech for presentation of John Frazer's portrait, at Commencement day. I must finish next week my anthracite map and report, and Caledonia report, and write a new report for Graham, and get ready to go to North Carolina. But next week, Platt goes up the Hudson for recreation, and I must attend to the paper myself. James Hall writes that he is coming here to arrange for the palæontological collection.

If I were not in such good health, I would take to my heels, and let them set detectives on my traces. As it is, I mean to fight it through, and let the future be responsible. Don't be worried about me and love me as ever. . . .

PHILADELPHIA, *June* 24, 1873. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Be careful not to carry your pleasures,—or rather to let your pleasures carry you too far. Temperance in all things is a noble virtue to cultivate, and insures first, long life, then healthful powers of doing good, solid enjoyment in all occupations, and balance of judgment.

. . . Our Freshman crowd of yesterday was still further reinforced to-day, so that they already number 100 in both departments, and will probably number 150 before the end of September. . . .

PHILADELPHIA, *June* 26, 1873. PETER LESLEY TO HIS WIFE.

. . . I have been so busy that I could not prepare a speech. I was so indisposed to speak of Frazer, that I could write nothing.

I let it go, until called upon my legs. The speech was made more difficult by the maladroitness of the Provost, in anticipating what I had to say. So I let myself loose without a system for my thoughts, and whether it realized anticipations, or not I have no way of knowing. I spoke from my heart. Ignored all biographical *facts*, dates, etc., as unnecessary, and spoke only of hanging a *family portrait* among the rest, on the walls of our new *home*. . . .

Last evening M. Burthe, *ancien élève de l'École des Mines*, Paris, came with a note from Louis Gruner to me. I talked two hours with him. He stayed to tea. I shall put him through the Coal regions, etc. . . .

June 27, 1873.

M. Burthe came again. . . . Got Mr. [Thos.] Clarke to come over, to talk bridges with him. Wound up with a geological lecture on coal, 1½ hours long. He has just gone, profuse in thanks, and evidently converted from Élie de Beaumont's absurdities about Anthracite. . . .

NORTHAMPTON, *June* 29, 1873. SUSAN I. LESLEY TO HER HUSBAND.

. . . I have been reading with deepest interest Miss Sedgwick's life and letters. Oh, how many, long gone to rest, it recalled to me! I cried over parts of it. But the domestic and social life was so rich and beautiful. Will there ever be any more like it, in our days that are burdened with luxury and care? Think of five brothers and their wives, all the most intellectual, witty, bright, benevolent people, all devoted to each other and to her, corresponding all the time when apart, and not one word of gossip or scandal, or talk about money, or what it would buy —just the earnest discussion of the politics and religion of their times, the books they read, the simple sweet anecdotes of family life, the loves and joys and sorrows of their neighborhood, the preaching of Dr. Channing or Henry Ware, the sweet intercourse with the Follens, the devotion to noble Italian and Hungarian refugees who found homes for years in their families; these are the topics that fill Miss Sedgwick's life.—She was the centre of it all, worshipped by brothers and brothers' wives, and walking hand in hand with them all.—S. says that the Sedgwick family were a perfect mutual admiration society. But I say, would to God there were more such!—It would make this earth an Eden. . . .

Sunday Noon, June 29, 1873. PETER LESLEY TO HIS WIFE.

. . . Get No. 1516 of the *Living Age*, and read Louis Napoleon painted by a contemporary. It will pay you for the trouble. It gives a new idea of the man. They are the stories of his foster-sister Mad. R. Her refutation of his illegitimacy, Page 309, is very urious and will interest you. His motto:

A qui attend, tout arrive à point; à qui va trop vite, tout manque: is precisely my philosophy of life. It is the classic *festina lente*, in good modern French.

I have bought books. You stare. But I am free now, and the hunger of the scholar has invaded me. I have bought Helmholtz' lectures, edited by Tyndall; Palmer's narrative of the Sinai survey; Büchner's and Haeckel's last books; and brought up from the Society's rooms lots of fresh transactions, and proceedings of foreign societies. I sit up until 11 o'clock reading, and go to bed happy, sleep soundly and wake up refreshed to my work.

. . . Last evening I sat an hour with Aunt Ellen talking of my father and Uncle James. Her praises of my father were sweeter than honey and wine. But they excited all my longings for his dear sympathy and counsel. I mourned that you and the children had lost so fine a friend. I painted a thousand pictures of what might have been—every day. But the past is past, and the future suffices for its own. The young will enjoy what we have lost. It is their turn. We have had ours.

I have nearly finished my map, and it is beautiful. It is accurate and full of ideas. It tells me the story of ages of adventure. Rocks also are sufficient unto themselves, and the surface of the globe does not need man. Generation and regeneration is an ever-working law. Erosion and deposition make one of the epics of history. What has become of all the waste? The fossils of the Atlantic used it while they lived, and are entombed in it.

A Scotch boy asked of his schoolmaster: "Whar div a' the figures gang till, when they're rubbed oot?" Philosophers have been putting the same question apropos of souls, in all ages. . . .

PHILADELPHIA, *June* 30, 1873. TO HIS WIFE.

. . . In church last evening. It was a dreary sermon, but the music was delightful. As I had lost my soul by working 8 hours, I thought I could do no less to save it again than go to Church at 8 o'clock. Certainly, if an hour's penance be accept-

able, I was accepted. How the Middle Ages hang on! It reminds one of the Cretaceous aspect of our actual flora in America. . . .

One of his daughters had written to him of her distress in the study of history, the acute pain she felt in hearing of the sufferings and horrors of past times. To which he replies (July 3, 1873):—

Tell my Margaret . . . I appreciate all her ideas, and have had experience of the same things and comprehend them. If I were she, I should read nice books of travels instead of history, and nice biographies of great, good, and learned, and skilful men, of past times. When she travels, they will make the places she visits full of rich interests. It is not the conquerors, nor the martyrs, but the scholars, artists, artisans, and men of science, who have blessed the world and glorified countries. . . .

Sept. 28, 1873. SUSAN I. LESLEY TO HER DAUGHTER (on the same subject).

. . . I have thought a great deal, dear, about your difficulties in studying History. I sympathize with you profoundly, and your dear father even more so, for he suffered in the same way when he was a boy. But he conquered the pain, and became a rare student of History, because he knew he could not do without the knowledge it contained. Try to look at it something in this way, dear Margaret. All the goodness and beauty you see on the earth to-day, has been brought about by ages of suffering and misery, just as all the beautiful trees and flowers come out of the dark and gloomy earth. The souls of all the Martyrs are now with God, and an eternity of blessedness well repays them for all they suffered here. But their suffering was over long ago, and they have made the earth a better place for you and me to live in, and for thousands of others, also.—As you read History, you will see how the spiritual ideas of every age are superior to those that went before, and how as you come down to our own time, the cruelties and oppressions of the past, are almost gone. But Margaret, my child, we have to know the world as it is, and as it has been, and I think it would be unwise in you now to give up History, without trying a little longer to get over this feeling about it. . . .

PHILADELPHIA, *Sunday*, 9 A.M., *July* 6, 1873.
PETER LESLEY TO HIS WIFE.

Please do not lose courage. If you do, we shall all four go to the bow-wows, *gerade zu*. As the summer passes, you will feel better; and a month is a long time to stay in one place. It is well that "there are *many* mansions," *jenseits*, to give restless people a chance to move round, not only until, but after, they are suited. I shall move until I get into a two-storied house with a high tower, and a cloister, a flower garden and screened arbor, an allée of American elms a mile long and perfectly level, a high rock with a cave in it, a sea beach and blowing cleft, a workshop, laboratory and library, five friends, two male and three female, a baby, a Newfoundland-St. Bernard dog, a Maltese cat, a monkey, three blind mice and a hand organ to dance to, an old-fashioned four-in-hand stage, passing every morning after breakfast and throwing off the family mail-bag at the bottom of the lawn, Sam Weller for body servant and Ralph Waldo, Herr Tho luck, Désor, Huxley and Henderson living neighbors over the way.

With less than that as a permanent arrangement for the next millennium, I shall never consent to be satisfied. You may suggest some improvements in your next letter, which I will carefully take into consideration, and act upon as opportunities offer.

. . . Thus a man's life's labors accumulate, and the pyramid of his tomb temple gets erected while he lives. Which reminds me that I have not yet finished my translation of Lepsius' last memoir on the metals of Egypt; nor done a line for a long time on my Six Early Dynasties. Even Thompson's Cornice is not quite ready to put up. . . .

In a letter of July 8, 1873, from my mother, she speaks of the effect of a too exclusively intellectual and rationalistic philosophy upon the life and character of a friend, and adds:—

Alas! who would exchange even the old Calvinistic theology with its stern sense of obligation to God and Deity, for the Positive Philosophy with its fine metaphysics. With all its hard and jagged outlines, the one is a rock to cling to when drowning, but the other may land one on a shoreless sea. You will think me inconsequent, and I cannot stop to explain the train of my

thoughts. Apropos of this however I enclose to you the Lyman Coat of Arms,* which Joe Lyman had heliotyped from his Uncle Joseph's. My brother Joseph replaced the old motto, which he disliked, with the present one, a favorite of his from Lucan. The old one meant "Whither the Fates lead."

LYMAN COAT OF ARMS

To which my father replied, July 10, 1873:—

. . . I appreciate entirely what you say about Orthodoxy and Positivism. I believe the same. Give me the grand old condiments of Christendom, Charity, Faith, Duty, Truth, Temperance and *Hope*, and you may throw the devil in without spoiling the soup. Leave out the spiritual, as the world has known it and lived by it for two or three thousand years, and life will fossilize into rock, and contain beautiful forms that are but images of living things, relics of what once was motion, happiness and use. Poor C., I mourn for him, with genuine sorrow. How many slide thus down slopes more or less steep and rapid into—nothingness! For not to believe, adore, hope, esteem, approve, sympathize, co-work and comfort—is to become nothing, and worse than nothing, an obstacle and offence.

What is life worth, if not at the value of its *greatest* objects?

He that saveth his life, shall lose it, and he that loses it, shall find it.

Nec propter vitam vivendi perdere causas.

No man ever lived up to a finer motto nor in a finer style than your dear brother [Joseph] himself. No wonder he changed the old motto with which he had no element of character in common, for *his* fate was his own noble will.

The dove in his crest came apropos. For he was to me like a wild pigeon of the woods, with its swift and silent flight, and its pensive, full note,—heard, not seen.

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* I give this coat-of-arms here, as sent to me by my cousin, Mr. Frank Lyman, who uses it as a book-plate.— EDITOR.

Nor was the dolphin inappropriate, for it carried Arion, as Joseph Lyman supported Theodore Parker through the waves of that troubled life, to the shore at last. . . .

PHILADELPHIA, *July* 11, 1873. PETER LESLEY TO HIS WIFE.

. . . It is ten o'clock, and I have written 25 pages of editorial matter to-day.

. . . Did I tell you that Hall [Prof. James Hall] went back to immediately commence making up a *teaching* museum of fossils for me, trusting that it should be made scientifically complete afterwards?

I am extremely interested in Palmer's narrative of the Sinai Ordinance exploration, the innumerable cities, cairns, circles, graves, etc., etc., of a very numerous primeval race, all over that land South of Palestine. All the now desert valleys are elaborately dammed with aqueducts, wells, vine mounds, etc., etc., showing great fertility in ancient days, a heavy forest, etc. Perhaps Moses and his Israelites were genuine folks, after all.

Mr. H. has returned and acknowledges his error in doubling a bed. I can stay at home and see more than all my assistants can see on the ground. It discourages me for the future. But I keep on training them. And they keep on training me. "Patience is a good root."

I remember my father once saying, apropos to a discussion of the uses of imagination in scientific research, that he considered that his poor sight had been of distinct advantage to him, because, since he only half saw things, he had been obliged to take note of what he did see as an *indication* merely of what he could not see, and his imagination was rigidly trained to supply the probable, or, sometimes the inevitable, sequences.

KEENE, *July* 15, 1873. SUSAN I. LESLEY TO HER HUSBAND.

. . . Our dear lame minister of last Sunday left us yesterday morning, perfectly charmed with his visit, and full of feeling when he parted with Margaret, Lucretia and myself,—Ahem! I hide my head, and tell you that he said he did not often meet with three women like us.—He told sweet stories Sunday evening. He has wandered from place to place, always poor, I know, though he did not say so. His first settlement was in Northumberland,

Pennsylvania, where he remained three years, very happy, over the society which Dr. Priestley founded.—He described the little church of only a hundred souls, wealthy, cultivated, and aristocratic, wanting no addition to their numbers, and all of them of English birth or descent. He said it was their custom to let the little children wander round as they liked, quite without restraint.—The very first Sunday he preached, a little girl of four years strolled out of her father's pew and up into the pulpit. He heard the little feet come pattering along to his side, but paid no attention.—At last a tiny hand slid into his, and a little voice said, "Man, are oo most foo?" ("Man, are you most through?") He said he never had such hard work as to keep his countenance and go on with his sermon.

KEENE, *July* 17, 1873. SUSAN I. LESLEY TO HER HUSBAND.

. . . I have been reading Lecky's History of European Morals to myself, and have just finished the first large volume. It interests me intensely. I cannot read the whole of it to the girls, but now and then some fine passage, or number of pages, like the character of Dean Milman in the Preface, or the life of Marcus Aurelius in the splendid chapter on "The Pagan Empire," is so exceptionally fine, that I read them aloud, to the great delight of the dear girlies. . . .

PHILADELPHIA, *July* 17, 1873. PETER LESLEY TO HIS WIFE.

. . . Everybody is out of town, but I get along comfortably, reading all sorts of things. Have finished Palmer, and think better of Moses. But it's all in a muss anyhow. What a shame to let such a great country get so spoiled. I dislike Arabs—tent Arabs, I mean. . . .

PHILADELPHIA, *July* 17, 1873. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . You will enjoy much, and I shall enjoy it with you. You will suffer much, and I shall suffer with you. But we have a Magna Charta, both of us,—a charter of liberty and power, which the world cannot take away from us, which we can throw away, or let lie useless to moulder, or let others deface by impertinent obtrusion and intrusion, if we be so unwise as to permit it. But so long as we maintain our personal liberties, even against our friends, as well as against our enemies, we shall be sufficient unto all things.—Happiness will not then spoil us, enfeeble us,

or puff us up; and the worst sorrows and sufferings will not beat and break us down.

God lives alone.

Man should live alone.

In the midst of society, cultivate solitude.

In the rush and plenty of your loves, preserve the liberties of your own individual soul.

Let no man, no woman, get complete control of you. The world will change many times under your feet, and before your eyes, and around your heart; but your own self, let that be an unshakable, immovable, noble and powerful centre. . . .

July 18, 1873. SUSAN I. LESLEY TO LYDIA MARIA CHILD.

. . . For myself, I wonder if I am your Susie of twenty-five years ago.—No! as you say, we should not recognize our old selves could we see them. I was fifty years old, the 7th of last April, but I feel much older,—my hair is quite gray, my face pale, and my figure stout. When you speak of the trials I have had, I almost stop to think if I have had any. For I meet with few persons who have not had continual disappointments. And with me, I have always had the things I most desired at the outset of life, and so was willing to take a certain amount of ill-health, small means and anxiety, for the sake of holding these, my dear husband and children, and the friendship of the good. Oh! I had half a mind the other day to send you my letters from Peter the last month, all of them hastily written, his work so overwhelming and exacting. The allusions to people you would not understand,—yet they would show you how happy he is, and how many depend on him for work and for life. I do not know if you know that he is now Professor of Geology and Mining Engineering, in the University of Pennsylvania. This brings him in constant contact with youths from all parts of the country. These students are devoted to him, and full of enthusiasm for science, and he is like a father to all his 70 boys. Besides his professorship, they made him Dean of the Faculty, to the end that he should attend to the discipline of the whole department of Science.—Well! I think I see him discipline—He never could discipline his own children, . . . but he is now our laughing-stock, at home, for his utter inability to discipline naughty students. They have only to say to him, in a wheedling tone, "O Professor, please don't report us to the Faculty, and we will never do so again." And he will answer, "My dear fellows, I haven't the smallest intention of reporting you to the Faculty, and I don't suppose you

ever will do so again." Whereupon, the crowd throw up their caps, burst out of his room in the most uproarious manner, shouting, "Three cheers for the Dean."—I wonder what they would think of such disorderly doings at prim old Harvard. Peter says his boys are all angels, but Mary and Margaret and I know better. All *his* folks always were angels, according to him. He isn't reliable.

Peter edits a Mining Journal weekly, and has charge of the Philosophical Society still, and employs assistants to make private surveys, from which he works, making the Maps and Reports.—His life is one of constant responsibility, as this is all in addition to 12 hours of lecturing in the University every week. But he has so systematized his life, that as yet he is able to keep all these balls in motion without apparent injury to himself.

. . . And you and David still jog on in your patient, loving and isolated life! How, in this world of shows and shams, your life seems to me a holy spectacle for men and angels! I grieve to hear of David's sufferings, and wish something could be done next winter to keep off his rheumatism. It seems too hard for anything. How is it you keep your hearts so young and your minds so vigorous, amidst all the trials and disappointments of your lives?—Ah! never was a truer word than that, "The kingdom of heaven is *within*"; and again, "It cometh not with observation."

When in Northampton, I made them drive me to the little home you once occupied. It did not look so neat and trim as when you lived there, and there were many brakes and tangles in the soil that David's hard work once made to blossom like the rose. Near the porch where I, a young girl, used to sit and talk to you, seated on my horse's back, a little calf was tethered. I saw no face of man or woman, and I was glad.—I lingered about the place, as near a sacred shrine, for once it was occupied by those whose brave lives and words were dear to my youth, and will be dear in my memory while life lasts. To me it was one of the "many mansions," like the old world stations in Catholic countries, and my reverence was as complete as theirs. . . .

The picture of my father as Dean of the Scientific School was perhaps a little overdrawn for the amusement of an old friend, but it was, I think, essentially true. He had not much faith in the efficacy of rules and regulations, and he had not the time to enforce them. He took it for granted

that his students came to him to learn from him what he could teach. If they were wilfully inattentive, so much the worse for them. If he was unable to interest or enlighten them, he must attack the subject in some clearer way. For the good but stupid student he had endless patience and kindness, and would devote his whole energy to clear away the difficulties in his path. For those who had love of science and enthusiasm, he felt the strongest interest, and, as my mother said, a truly fatherly affection.

In spite of his easy methods of dealing with his students, I doubt if he was ever treated by them with anything but respect and attention. He had a quiet dignity underlying all his vivacity and enthusiasm, which could not but be felt even by the most rollicking and care-free student.

PHILADELPHIA, *July* 26, 1873. PETER LESLEY TO HIS DAUGHTER MARY.

. . . Meggy tells me you neither read nor write. I am glad of it. I wish every young person could be compelled to pursue the same regimen for months at a time. Our age is given to too much reading and writing. I had on Tuesday a strange and new experience. I neither read nor wrote for 24 hours! I meditated, vegetated, browsed on thistle tops in an open pasture like other donkeys, and felt great delight. One's thoughts get to be like worn wool clothes, matted in the fibre. They must be hung up awhile, and then the elastic fibres uncurl, and the garment grows young again; the packed-in dust of months is spontaneously flung off, and the air circulates through warp and woof. The soul, the brain, needs repose now and then. The eyes need it also. Every organ needs times of being let alone, like business men at New Year, to balance their books. I have lately read a wonderful lecture on the eye by Helmholtz. I will bring it with me and read it to you. It shows many defects in the organ, but its total adaptability to its uses in spite of all defects. I was particularly struck with the fact that the little ring of muscles around the lens only operates when near objects are to be looked at. For when the eye regards distant objects, it is *at rest.* No effort is required then to adjust the focus. Only when a near object is looked at does a wilful and energetic adjustment take place. When released, by turning to distant objects, the apparatus flies back and *rests. Hence* to look at the distance is the

natural and normal business of man's eye. Only when this is its *principal* business can the eye continue sound. Too much reading, writing or confinement within narrow spaces like a room, results in an overstrain of the muscles of adjustment, so that a new and false permanent set to the apparatus becomes inevitable.

Sunday, Aug. 3, 1873. PETER LESLEY TO HIS DAUGHTER MARY.

. . . It is not my fault that I am not beside you this sweet Sunday morning, as my intolerably long and frequent letters to your Mother have given you to comprehend. As they say the Marquis of Westminster replied, when requested to return a repartee to a Frenchman's compliment: "Je woudrais, si je coudrais, but je cannais pas." It is so delightful to be sufficiently well educated always to converse with cultured foreigners, in the elegant idiomatic language of their own country! *N'est-ce pas?* . . .

. . . I read the newspapers with interest. The Spanish republic is going through teething, measles, whooping-cough, and chicken-pox, all at the same time. It looks as if its second summer would go hard with the poor baby.

Italy is a still more curious study. The account given of Rome's Common Council, just *elected by the people*, is something wonderful. Such great men, such old names, such "an eminently respectable" thing, as John Tyndall would say! Imagine, sittıng in the Chestnut St. Common Council Hall,—the Prince Marc Antony Colonna,—the Marquis Vitelleschi, a moderate liberal, and an accomplished scholar,—Finali, senator of Italy and Secretary of Agriculture and Commerce, a scholarly and hard-working man of sense,—the Marquis Savorelli,—the Commendatore Astengo, an eminent lawyer,—Quirino Quirini, Alibrandi, and Balestra, three young lawyers of mark, the first celebrated for his eloquence,—Correnti, late Minister of Public Instruction —Cairoli, member of congress,—Biagio Placedi of the Public Education Bureau, deeply interested in the Italian Common School system, and chief man in establishing the "Franklin (! *sic*) Circulating Public Library" in Rome,—Castellani, the celebrated artist jeweller of Rome,—Gabet, the architect,—and other rich land-holders!

It seems to me, my dear Mary, that if we could get as near to Japan as we are to Italy, we should feel a striking likeness between the case of the Pope and King, and the case of the Mikado and Tycoon, only reversed. The utter helplessness of the

old Giant in the cave by the wayside of Bunyan, in his Vatican palace, is pitiable. He has recovered his health, and thrown away, or stood up in the corner, his crutches, but he cannot regain a particle of his lost power. He cannot even make Cardinals, for he is too poor to pay them their salaries of 4000 scudi per annum. He is very vindictive, and makes long and most imprudent speeches which are published everywhere, to the dismay of his friends and the delight of his enemies. His speech on occasion of the recent earthquake, which killed so many of his friends while at mass, was a dreadful blunder, for he exulted in it as a visible mark of God's wrath against the Liberals of Italy! He even had the bad taste to jest on its occurrence simultaneously with the advance of the cholera to Venice, calling them the "Left and Right," in reference to the two parties in the Italian Parliament.

"Whom the Gods would destroy, they first make mad."

But, my dear girl, I am prosing politics to you, when I meant only a *billet doux*, to assure you of my constant remembrance. . . .

Aug. 4, 1873. PETER LESLEY TO HIS WIFE.

. . . I am playing at arranging my Father's papers, and find a 4° volume of my letters to him. . . .

Aug. 11, 1873. TO HIS WIFE.

. . . I tore up my earliest remaining letter—1837—to Father, just now. Ah, Vandal! Yes, but I couldn't help it; it was so terribly soft. Lord help young men, if all of them write so at 18 years of age.

Probably I shall tear up the rest, one by one. We shall see.

How little of the past will bear record! Fire and moth are benefactors of mankind. Nature sets slight value on what has served its time, especially if the service be but so-so.

I feel to-night as free as a bird.

Life is a series of new births, with a certain thread of connection.

Lift up your heads, O ye gates, and be ye lifted up, ye everlasting doors, and the King of Glory shall come in. The months and years are the gates, and the King of Glory is the soul, proceeding from court to court of the divine temple.

Are ye not kings and priests unto God?

Oh, if we were filled with the consciousness of our own majesty and sanctity, how noble would be our stepping, how grand

the beauty o. our countenance! What heavenly music would attend our going, what power, what beneficence!

Will there never be an age when the nation shall reflect the wisdom and beauty of God? I shudder at the incessant vulgarity of words and tones in the streets. It was delicious to walk in the stream of people going home from church. One might fancy the millennium come, the earth regenerated, the wicked all converted, Christ reigning somewhere, laws perfect and obeyed, evils banished to the limbo of history, love abounding, virtue in the air. Blessed dream! . . .

PHILADELPHIA, *Aug.* 30, 1873. PETER LESLEY TO HIS DAUGHTER MARGARET.

[In . . . drawing] your hand is growing firm, and your treatment of a subject is strong. Improve yourself now in *accuracy of drawing from nature*, so as to be perfectly truthful in your lines, and so as to be independent of other artists (whom now you are subject to, as a copyist), and you will certainly succeed. Originality consists in acquiring one's own manner of copying *nature*. Every true artist has an independent eye, and an independent hand of his own. All copy nature; she is the only infinite, grand and sweet original—or originator. But the "original artist" is one who looks at nature (*i.e.* God's ideas), not through the eyes of another artist, but directly with his own; and whose hands are trained by his own eyes, and not set to the pattern of handiwork of some other artist. *That* is Mannerism. An artist may after a while copy himself, and become a manner-ist; and many do; because they admire their own earlier pictures so much (so much more than the natural originals), that their later pictures are mere copies of their earlier pictures (with a difference), and not of nature. The eye should never grow dim; *then*, the hand will always stay brisk. . . .

PHILADELPHIA, *Aug.* 31, 1873. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I think of you at the New Sybaris [Edward Everett Hale's summer home] with delight, and beg you to present my loving compliments to Pythagoras and his entire school. How the old Simon Pure would have opened his eyes to see in prophetic vision what you see! Think of it! he never saw a yawl! nor a blackberry! nor an arm-chair! not to speak of watches, printing-presses, rifled cannon, locomotives and the Great Eastern. He never

heard of King Philip—nor anything in the least resembling a copy of *Old and New*. What Mexico is now, France and Spain were then. He hadn't one sound principle of physics to think by. Mathematics occupied all the ground, like trilobites in the lower Silurian era. All he could do with nature, was to count her up,—spiritually, he breakfasted, dined and supped on decimal fractions. What a noble statistician he would make, if living now! The ocean of knowledge on which we sail, compares strangely with the rivulets in which those old philosophers baited their tiny hooks and caught their queer-looking minnows. We think the animal and vegetable forms of early geological ages *bizarre* and amazing. Not more so than the diabolically constructed fancies of the philosophies of the early times of man's thinking.

Nine o'clock. I have just returned from gossiping with dear Aunt Ellen Lesley; a lady of the old school is she. We talked of Uncle James, and Miss Dix, two equally remarkable persons. . . . And she wound up with telling me what a beautiful boy I was! How my mother used to stand me and my sister on the seat in church, when service was over, and everybody said there were not two such beautiful children in all the church. I must have been surrounded by wise people, for I grew up with the depressing conviction that I was ill-favored. And now, my love, it is too late to find out that I was a real beauty. It is hard to decide what is wisdom. My life would have been made much easier for me, if somebody had told me that I was a handsome boy. But I never heard a remark that suggested such an idea. Consequently, I considered myself ugly, and was timid accordingly, for I believed early in the lordship of beauty. . . .

PHILADELPHIA, *Sept.* 3, 1873. PETER LESLEY TO HIS WIFE.

. . . Thank you many times for your interesting diary of last week. I always rejoice in your *grands rendezvous*, and hope that they will never cease to happen. They shall not if I can prevent it. There is something fine in your enthusiasm; it inspires me to see it. I hope our children will be enthusiastic, whatever else they may not be. It is to the soul what animal spirits are to the body. It makes New England the Mentor of the United States. . . .

From a letter of my mother of December 7, 1873, to her daughter Margaret, I take this description of an episode

in one of my father's surveying expeditions, this time in Centre County, Pennsylvania:—

. . . After tea, the bar-room looked comfortless, so he wandered up the street to see what he could see.—At last he came to a lighted hall, and he walked in, and found about 30 young men sitting on benches, but all very silent.—He asked what the meeting was, and they told him it was the Young Men's Christian Association. He waited awhile, and no one spoke, so he rose and told them he was a stranger there, and not a *young* man, and perhaps he had no right to speak in their meeting, but he should like to very much.—Several said, "Oh, yes, Do."—So he preached to them for a whole hour, without a pause.—He gave them the history of the associations that existed before the time of Christ, and those that had existed since; the objects and aims that had animated them, the causes of their rise, and their successes, the reasons why they had ever failed.—And he ended with an affectionate exhortation to them to work for the salvation of other souls, rather than their own.—Then he quietly left the hall.—But they followed him in a body, thanked him in the most heartfelt way, begged to know his name and occupation, and what church he belonged to, and grieved that he would be off in the early morning train.—The minister insisted on his going home with him, and talked till midnight, parting from him in the most cordial and heartfelt way. He said the whole time was most interesting and carried him back to his old Colporteur days. . . .

PHILADELPHIA, *Dec.* 13, 1873. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . Your letters have been a great delight, as they always are. All that you say of Mill, finds a ready echo in my mind. I had read the extracts in the newspapers from his life, and had been much disturbed to find that his marriage, which we had always supposed to be such a high and superior connection, had really such a low basis.—For what could be lower in both of them than the ability to be happy in each other, at the expense of the happiness of a good man like Mr. Taylor? Though as you say, I think she was more to blame than Mill, who was peculiarly susceptible to temptation after a youth of such starved affection and over-stimulated intellect. Peter never admired John Stuart Mill as much as I did, and so he suffers less than I do in having to think less highly of him.—I always greatly admired the Essay

on Liberty, and the one on the Subjection of Women, and many others.—But his life seems to me one of the most melancholy, and little fitted to make him a guide in holy living. This morning I was reading a volume of Robertson's "Lectures and Addresses to the Working Men of Brighton," and I was struck with this simple sentence about liberty: "People talk of Liberty, as if it meant the Liberty of doing what a man *likes*. The only liberty, that a man worthy the name of a man ought to ask for, is to have all restrictions, inward and outward, removed, which prevent his doing what he *ought*."

. . . We see this morning that Agassiz died last night. A great light is put out! Peter is much affected. . . .

PETER LESLEY

Photograph taken about 1875, *probably*

CHAPTER XXVI

Second Geological Survey of Pennsylvania

In the early summer of 1874 a bill for a Geological Survey of Pennsylvania was passed by the legislature, and my father was chosen by the governor to be the State Geologist.* This was the crowning event of his professional life, and the greatest opportunity which had ever come to him. For years he had desired that such a survey should be inaugurated, and he must have felt that he was competent to organize and carry it on.

Mr. Lyman in his biographical notice says:—

He was now fifty-four years old, and besides his unusual natural qualifications, and his thirty-five years of remarkable geological experience and reputation, his long and honorable connection with the first survey, his having constructed its State map from the mass of hitherto undigested materials, and his extraordinary familiarity from direct personal observation with the geology of all parts of the State, clearly pointed him out to every geologist as the man of all men for the position; and the State was so fortunate as to discover the fact and secure his consent. Indeed, although the pecuniary compensation was small, compared with what his private practice would bring, and the responsibility was heavy and unceasing, he entered upon the new undertaking with enthusiasm. For he had through many years been anxious that a thorough survey should be made of his well-beloved, magnificent State, so richly endowed with useful minerals and so abounding in geological problems of the highest theoretical interest and enormous practical importance; and he must long have been fully conscious that there was nobody in the

* For several years previous to this date there had been attempts to pass such a bill. As early as May 12, 1870 (in a letter of my mother to her brother Joseph Lyman), mention is made of a bill "all ready to present to the legislature, but postponed." In 1871 the governor again "strongly recommended" a survey bill in his message, and such a bill was introduced.

world who could compare with him in fitness for taking charge of the work.*

In looking back over his life, it does indeed seem that everything which he had previously accomplished increased his ability and efficiency in the great work which he was about to take up. His three seasons on the First Survey; his preparation of the State map, and other topographical and geological drawing, for Professor Rogers; his work on the notable little book, the "Manual of Coal," and on the bulkier "Iron Manufacturers' Guide"; the many careful and elaborate private surveys which he had made, not only in Pennsylvania, but in adjacent States and in the coal lands of distant Cape Breton; his detailed studies of the Bessemer steel process in America and Europe; his constant interest and study of geological problems everywhere; and his years of teaching his favorite science in the school-room and laboratory of the University,—all these were preparations for this new and great work.

Besides these personal advantages, he had now a host of friends in the scientific world through his association with many scientific societies, of which he was an active member and to whose publications he was often a contributor.† He was also well known among professional and business men, for whom he had done much scientific work, and was widely recognized as an accurate and trustworthy practical geologist and mining engineer.

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* Biographical Notice of J. Peter Lesley. By Benjamin Smith Lyman, Philadelphia, Pa. (From the Transactions of the American Institute of Mining Engineers. See Appendix for reprint of this.)

† "Mr. Lesley was not only an honorary member of the American Institute of Mining Engineers (1890) and corporate member of the National Academy of Science, and fellow of the American Association for the Advancement of Science, as already intimated, but he was a member of the Academy of Natural Sciences of Philadelphia, of the Boston Natural History Society, the American Oriental Society, the Oriental Club of Philadelphia; foreign honorary member of the American Academy of Arts and Sciences; foreign member, Geological Society of London; associate member, Société Géologique du Nord; member of the Moscow Imperial Society of Naturalists, the Emden and Neufchâtel Academies of Science, and the Lille Academy of Natural Science. In 1878 the degree of LL.D. was given him by Trinity College, Dublin." (*Mr. B. S. Lyman.*)

He had, undoubtedly, before this time thought much in detail of how such a survey should be organized. He had the experience of the First Survey both as a guide and a warning, so that, when the bill was passed and the matter put into his own hands, he was prepared to take the organization up at once.

One of his later assistants on the survey,—Dr. Henry M. Chance,—in his biographical notice of my father, writes:—

The passage of the law inaugurating the Second Geological Survey of Pennsylvania was in response to a demand for accurate knowledge of our mineral resources, arising from the expansion of manufactures following the Civil War. At that time few of the states were prosecuting such surveys, and those so engaged were hampered by lack of funds and scarcity of specialists trained to the work. No established mode of conducting such surveys had been formulated nor had any system been devised for a prompt publication of the results.

As organizer of this survey, Professor Lesley was thus confronted with problems, upon a satisfactory solution of which the future of the survey surely would depend, for the appropriation made by the legislature was sufficient to cover two or three years at most, and unless the people were satisfied with the results there could be little if any hope of further appropriations. From the inception of the work, it therefore was essential that reports be made and published each year, that these reports consist of great accumulations of facts describing the occurrence of ores, oils, coals, and other valuable deposits in a form useful to the practical miner, and that the deduction of general laws, correlation of geological names, elaboration of geological structure, investigations of deposits of obscure origin, and palæontological studies, all must be deferred until the survey had been in progress for several years.

To meet these conditions, Professor Lesley devised the system adhered to throughout the life of the survey of publishing the material in "Reports of Progress," each report being an octavo volume, usually confined to a certain district or county, that data covering any locality could be obtained from a single volume—now a system of recognized merit, and since adopted by other governmental surveys.

In planning the organization and scope of the survey, the Board of Commissioners extended to him the utmost freedom,

conferring upon him power to use his own methods, to select his assistants, to determine what work should and what should not be done, relying upon his judgment and ability to produce the best results at least cost, and standing loyally by him as stanch friends and supporters through all these years.

Almost immediately after his election he appointed as his principal assistants Persifor Frazer, Frederick Prime, Jr., John H. Dewees, Franklin Platt, J. J. Stevenson, John F. Carll and Andrew Sherwood, geologists, and Dr. F. A. Genth and A. S. McCreath, chemists, each being assigned to a certain district or to special duties, and given one or two younger men as aids. With these as a nucleus, he gradually built up, chiefly by promotion from among the younger men, a large and efficient corps of trained workers, to whom he accorded the greatest latitude, encouraging them to originate, to devise new methods and theories, holding them responsible only that their work be well and accurately done. Probably no public organization was ever less bound by the red-tape of officialism than this survey corps, whose members he left untrammelled, unhampered, trusting each to do his duty, thus placing each in a position where he was driven to do his best, where he would be ashamed to do less.

He assumed the editing and proof-reading of nearly every report, generally contributing a preface discussing matters of most striking interest and disputed questions of geological nomenclature or theory. These prefaces are clear, concise expositions of the subjects with which they deal, so plainly written that the layman may read and understand, yet often defining the nicest possible distinction between opposing theories, ably and subtly reasoning for both sides—models of terse, forceful English.*

In order that prompt and frequent reports on the local geology of the State should be printed and distributed to the people, my father distributed his corps of assistants among the counties of the State, and made, as is indicated above, reports of each county or district, as rapidly as they could be accurately prepared.

He himself occasionally visited the assistants in the field, but the press of work in the office was too great to allow of

* A Biographical Notice of J. Peter Lesley. By Henry M. Chance. (From the Proceedings of the American Philosophical Society. See Appendix for reprint in full.)

his being away from home for any considerable length of time. For a number of years he kept the office in his own home, and here he was usually to be found hard at work, over his desk or at his drawing-board.

It will be remembered that he had in early life found occasion to blame the Director of the First Survey for not having sufficiently shared the honors of the work done with his assistants. He was resolved to make no such mistake himself,—indeed, his generous nature would never have allowed him to do so. Therefore, the reports of the counties were published under the names of the assistants in charge. This fact, however, did not lift the burden of responsibility from his own shoulders. He read carefully every page of what was to be printed, and frequently found it necessary to rewrite large portions of these manuscripts. Mr. Lyman says of his method of publication:—

> He took pains to avoid one mistake of the First Survey, and did not let all the materials accumulate until a sudden cessation of the appropriations should leave it impossible to publish them at all for many years, while they were becoming, in great part, out of date. The work of the assistants was put in shape for prompt publication. In some cases they had not been so fortunate as to have the benefit of the best literary training; and responsible, as he unquestionably was, for the published form, and in some degree for the substance, too, he did a great deal of conscientious editorial work, making the reports intelligible and methodical, and even practically rewriting some of them. The mapping and the illustrations, in like manner, passed under his close scrutiny and revision. In addition, he wrote long elucidating prefaces to most of the volumes in his usual vigorous, lively, clear, straightforward, trenchant style. There were, in all, 120 volumes of reports and map-atlases, besides Mr. Ingham's handy little index-volume for them all.

In addition to these prefaces he also provided each of the volumes with several carefully prepared indexes,—always two at the least, one of names and places and one geological. Often there were three or four of them.

This leads me to speak of a method of work which

my father found very useful and which I may have mentioned before. When he found himself becoming exhausted by productive brain work, such as the prefaces or the special study of geological problems demanded, he was wont to turn to some piece of *drudge* work, such as the making of an index, the cutting up and pasting of illustrations in place, the tabulating of specimens, the waxing in of a relief map, etc. It was no rest to him to be idle, and this change of occupation was of the greatest value to him. After a period of such work, he returned refreshed to more intellectual writing.

He often indeed wearied of the mass of detail, the dry technicalities and enumerations in his volumes, but he could always cheer himself with the beauty of many of the maps and illustrations. I well remember his delight in the volume by his dear old friend Lesquereux, on the Fossil Botany of the State, "the Beauty," as he expressed it, among the many volumes. In the midst of his technical work, he found time for some more varied and inspiring writing. I quote again from Mr. Lyman:—

> Yet with all this attention to the details, he still found time for several volumes by himself. He began the series of reports by Report A, an Historical Sketch of Geological Explorations in Pennsylvania, written at the beginning of the Survey, and published in 1876. It was in his usual lucid, cheery style, and contained much hitherto unpublished information in regard to the first Survey, and many valuable pertinent discriminating comments. It had been his intention to continue in the same volume a sketch of the history of other American State Surveys; but the pressure of other matter to be published interrupted the volume at the end of page 200, and, with the ever-accumulating mass of material of the new Survey, the convenient time for its resumption never came. In 1885 he published his Report X, a beautiful collection of geological maps of all the counties in the State, on a uniform scale of 2 miles to the inch, with uniform coloring, arranged in octavo form, and preceded by text of his own, briefly pointing out the leading geological features of each county.
>
> In 1889 and 1890 he issued Report P 4, a Dictionary of the Fossils of Pennsylvania, in three volumes, compiled by himself.

It contains illustrations of all the known fossils of Pennsylvania, except the flora, already reported upon by Lesquereux and Fontaine; and all are arranged alphabetically, for the most convenient reference from the county reports, where they are mentioned by the different assistants. This is a handy reproduction of an immense number of fossil figures, gathered together from many widely scattered sources which are carefully referred to; in many cases, sources that are out of print and difficultly accessible, and in some instances rare. Professed palæontologists at first looked askance upon a work in their own field by one who did not profess to be one of them, and a work not zoölogically arranged; but in time they came to value it more highly, and Dr. Clarke, the State Palæontologist of New York, has, in his biological enthusiasm, claimed that the Dictionary is more sought for than any of the other reports of the Pennsylvania Survey. This is, however, a decided (of course, unintentional) exaggeration, though not without some shadow of a foundation. Mr. Lesley had always had the highest admiration of palæontology, though aware that in Pennsylvania its immediate usefulness in helping to work out the geology was not generally so important as in some other regions. He bore in mind that:—

"When the geological survey of Pennsylvania was first ordered, its first business was well understood to be not scientific, but practical. It was to study and to find out all about the iron, coal, oil, gas and other mineral resources of the State. . . . This task the Survey has faithfully and zealously performed for fifteen years; and its strictly practical character is acknowledged by those intelligent business men who are the wealth-producers of the State." Nevertheless, he adds: "I had always realized that the Survey would leave unperformed one of its necessary tasks if it did not fully explain the fossil geology of the State, as a supplement to its mineral geology; but the practical work of the Survey was so heavy that any adequate report of its fossils had to be left to the very last."*

Of his great work, the Summary Final Report, published in 1892 to 1895, Dr. Henry M. Chance writes:—

At the last, he undertook the preparation of a "Final Summary Report," a digest of the numerous Reports of Progress. This herculean task was assumed at a period when nature was

* Report P 4, p. vi.

calling upon him to rest, but disregarding all warnings he set himself at it, determined that it should be done. Over 1,800 octavo pages tell us, how well that work was done. It sets a standard for governmental reports. Nowhere can be found a more lucid exposition of facts and principles, unmarred by the assertion of personal theories, unbiassed, thorough and complete. In the introductory chapters of the first volume, including especially the essay on "Geological Time," better perhaps than anywhere else we find the impress of his sign-manual; here are arguments, conceived and developed in a brain accustomed to exact scientific analysis, recorded with the clearness and simplicity of one writing for children, yet with the logic of a master in debate; the product of genius beyond praise.

But this great task he was not permitted to finish; his strength was insufficient, and after publishing two volumes and preparing a portion of the third and final volume (embracing in all over 1,800 octavo pages), he reluctantly delegated to others the writing of the final chapters.

Professor John J. Stevenson, writing of his preparation of the prefaces and of the Final Report, says:—

The results of the work in each district were summarized in prefaces to the several reports. The necessity for such summaries increased with the number of volumes, for the districts were studied independently, and no report was bound closely to those by other observers in neighboring districts. These prefaces were steps towards a final report, enabling students to utilize quickly the work done in an extended area showing the same general phenomena. The labor involved in preparing them was very great; the manuscript of each report was read with the utmost care; the accompanying maps were studied with equal care, and not a few of them redrawn by Lesley himself, who prepared also many of the elaborate indices—all this, that he make himself thoroughly familiar with the details.

How well he succeeded is shown by the final report, which, unfortunately, he could not complete. He had finished the story to the end of the Lower Carboniferous, when his health gave way, and the rest of the work was prepared by others. In this report he summarizes every volume; he gives full credit to each member of his staff, while important phenomena, observed by the assistants, received full discussion from the standpoints of his broad

reading, and his own field work. There is no attempt to evade anything, no inclination to undervalue the work of those disagreeing with him; on the contrary, there is a frank presentation of opposing views, and frequently a retraction of opinions long held very dear by him. The more than one hundred and twenty volumes of Survey Reports are his monument.*

Throughout the twenty years of his active service as head of the survey, his personal relations with the Board of Commissioners and with his assistants were of the pleasantest kind. At the opening season in 1874 the board consisted of Governor John F. Hartranft, *ex-officio* president of the board; Mr. Ario Pardee, of Hazelton; Mr. W. A. Ingham, of Philadelphia; Mr. Henry S. Eckert, of Reading; Mr. Henry M'Cormick, of Harrisburg; Mr. James Macfarlane, of Towanda; Mr. John B. Pearse, of Philadelphia; Dr. Robert V. Wilson, of Clearfield; Hon. Daniel J. Morrell, of Johnstown; Mr. Henry W. Oliver, of Pittsburg; and Mr. Samuel Q. Brown, of Pleasantville.

Many, if not all, of these gentlemen became warm personal friends, some of them remaining on the board throughout its existence. They gave close attention to the affairs of the survey, and were heartily at one with my father in his desires and efforts to do the work with the greatest efficiency, aiding him in every way possible. Mr. William A. Ingham, as secretary of the board for many years, came into especially close and sympathetic intimacy with him.

One of the chief anxieties which my father and the commissioners suffered from, was that it was necessary every two years to get a fresh bill of appropriation passed by the legislature, without which the work could not go on. There was always therefore biennially a period of some months in the winter and spring, when the fate of the survey hung in the balance. This was a trial, chiefly because it was impossible to make plans ahead for the coming season, to engage the assistants with certainty that there would be work or pay for them, etc. After every such anxious time

* Memoir of J. Peter Lesley. By John J. Stevenson. (From Bulletin Geological Society of America, vol. 15, 1903. See Appendix for reprint in full.)

there was commensurate relief and satisfaction on all hands, and a renewed enjoyment of the work. But there were usually at such times, some members of the corps of assistants who could not wait on the uncertainty of legislative action, and were obliged to seek more stable occupations. These frequently recurring losses of assistants, were a real grief as well as a serious inconvenience to my father, who had warm personal affection for these young men. Yet he would often advise them to leave him if he thought it for their advantage, and he made it easy for them to do so. As Mr. Chance says:—

> Through the efforts of the Board of Commissioners, appropriation after appropriation was secured for the continuation of the Survey, but without resort to political influence or the methods of the lobbyist. He [Mr. Lesley] detested any appearance of lobbying, holding that the Survey should stand or fall upon its merits as appraised by the Citizens of the State.

In spite of the seemingly large sums appropriated to the uses of the survey, the work was so extensive and so varied that it required the greatest economy to make the two ends meet. To all his other cares my father added the accounting for this large sum, and devised a very perfect system of vouchers, which should show clearly to the Board, at the end of every month, where every dollar had gone. This, of course, could not be done without the use of much valuable time, but he considered it a necessary part of his duties, and felt great satisfaction in knowing at all times exactly what funds were in hand, and what every item of expense had been during the past month. I believe his system was considered by the Board and by the State Treasurer a model for clearnesss and exactness.

Of his relations with his assistants, Professor John J. Stevenson in his memoir before the Geological Society says:—

> He was head, rather than Director [of the Survey]. An Assistant once appointed was left practically to his own devices; but there was something about the personality of the Director

that impelled each one to do faithful work, that made the unambitious man ambitious. When the Second Survey was authorized, the conditions were much the same as when Rogers undertook the First Survey. There were few trained geologists in the country, and most of those were connected with one or other of the United States surveys. Professor Lesley had to begin with young men, of whom only three or four had had any experience whatever in field work. He dealt with them generously, considerately, and remembering his own early work, held them in all confidence. At times, indeed, he forgot that they were not men of broad experience, and his criticisms were none too mild. At others, unstrung by continuous application, he misunderstood the text of a report or misinterpreted a letter, and relieved himself in a communication which was a model of terseness and clearness, and which usually provoked a rejoinder approximately clear and terse. But such misunderstandings were of brief duration; breaches were healed quickly by his whole-souled reparation, and temporary ruptures served in the end to knit him and the Assistants more closely than before.

And Dr. Chance in his biographical notice says:—

Throughout this great task he never seemed to think of fame or honor to be won through it for himself, invariably giving credit to each assistant for the whole of his work, and reserving none for himself. In thus recalling his unselfishness, we are unavoidably reminded of the entire absence of anything like envy in his disposition. He never seemed conscious of professional jealousy, being utterly incapable of it himself, and failing to realize the possibility of it in others. In this he towered far above the mass of his fellow scientists, with few indeed of equal stature. It was characteristic of the man to ignore as trivial the use of his work by others without proper acknowledgment, although he was himself scrupulously particular never to offend others in this way.

In devising necessary modifications of geological nomenclature he was most careful to adopt from names already used by other geologists those appropriate and in common use, hesitating and generally declining to formulate any system which would destroy or obscure the work of others.

While thus cautiously avoiding trespassing upon others and ignoring trespass upon his own domain, he was severe in denounc-

ing charlatanism and scientific inaccuracy (which latter he regarded as an almost equal sin, and one of which he was most impatient), yet he was never bitter or vindictive, and when attacked by misrepresentation or captious criticisms, seemed to feel it beneath his dignity and a waste of time to reply.

A few of his early assistants had been his former students in the University. Several of these became noted geologists in later years. One of his most trusted aids was Mr. Charles A. Ashburner, to whose direct management was consigned a detailed survey of the anthracite region, and by whom, Mr. Lyman states, that "invaluable work was done."

Mr. Ashburner's death, while still young, was a loss both to science and to his friends, but he lived long enough to establish by his great ability and genius, his reputation as a geologist and a man of science.

The survey, as time went on, became almost a school for geologists, and several of these young men graduated from it to become the heads of Western State surveys. My father's interest in all of these was warm and constant, and his delight in their achievement very great.

Some of his most valued assistants joined the survey some time after its first organization: among the many such I will only note Dr. Henry M. Chance, Mr. E. V. D'Invilliers, and Mr. A. D. W. Smith, to the last two of whom was left the finishing of the Final Report, when my father's powers failed after twenty years of this engrossing care. Their faithfulness, ability, and wisdom in the fulfilment of this work were of the greatest comfort to him. Mr. Lyman says of this:—

It was naturally disappointing to Mr. Lesley to be unable to lay the cap-sheaf upon the greatest work of his life; but to his kind soul the bitterest regret was that he was unable, in doing so, especially to show his warm appreciation of the aid he had received from his assistants. One of them, however, Prof. J. J. Stevenson, in speaking of the Report, says:

"In this marvellous compilation he gave a synopsis of every Assistant's work, according unreserved recognition to each observer, and frequently showing an unselfish neglect of credit

due to himself for earlier discovery of facts and determination of principles."

All the Assistants, with scarcely an exception, gratefully appreciated his never-failing generous consideration towards every one of them; and some were ready to adore him.

A few of the assistants were already distinguished men of science, occupied with professional or geological work elsewhere. To this number belonged Professor J. J. Stevenson and Professor I. C. White. Those gave of course only a portion of their time to the survey. There was also Professor Genth, chemist of the survey, a man of world-wide fame in his especial science, and Mr. A. S. McCreath, the chemist in charge of the laboratory in Harrisburg.

Some years after my father's death the former assistants of the survey formed themselves into a club, I believe, and named themselves the Lesley Club.* It was a touching mark of their continued regard and affectionate remembrance.

It is impossible for me to give a full description of my father's work on the survey during the twenty years between 1874 and 1894, when he finally laid down the task. I have preferred to give a general account of the survey itself in the words of those who were best qualified to judge of its accomplishment, and who could bear personal testimony as to the methods of its director.

His letters give a hint of the great multifariousness of his activities and responsibilities. Every page of the hundred and twenty bulky volumes published in these twenty years, passed not once merely, but many times, under his careful eye; so also the thousands of illustrations, a large proportion of which he actually drew himself. He took personal charge of every step in the publication,—from the choice of author to the finished volume on the shelf. Often there were three or four volumes to be put through the press at once. Usually, he read the proof, though occasionally he left this to the author; but almost invariably he prepared the prefaces and the indexes, as has been mentioned above.

The mere matter of correspondence was a heavy burden.

* I am uncertain whether the existence of this club continued.—EDITOR.

There were almost daily letters to be written to the assistants, to the State printer, to the artists in charge of reproducing his innumerable maps and drawings, to the various commissioners on occasion; and always answers to letters from people of all kinds in every part of the State, asking all sorts of questions. With the aid of his faithful personal secretary, Mr. E. B. Harden, he was able to cope with all this in his own office. Mr. Harden was also the "Topographer in Charge of Illustrations, Correspondence, etc., at Headquarters."

There was also much labor in regard to the collections made by the parties in the field. They had to be examined and arranged for placing in a future State museum. Meantime there was no adequate provision for them, and they were therefore stowed away here and there, many of them in our own house.

With all this load of care and labor on his shoulders, the chief recompense came to him in his love of the work and his satisfaction in its good accomplishment.

For much of this period he kept the office of the survey in his own home. Every morning, directly after the eight o'clock breakfast, a succession of persons came to see him,—assistants just in from field work to report,—or about to take the field, coming for necessary direction or consultation; and other persons for various purposes. During the first few years he kept up his connections with the University, and delivered a number of lectures each week; but as time went on, he found it impossible to continue these professorial duties. Often his whole morning was occupied with professional conversation, and, looking back, I find it difficult to remember *when* he found time for the mass of writing and revising which it was necessary for him to do all through these years. As for the geological drawing, he often accomplished that, standing at his high table, while talking with his assistants, giving directions, and despatching other business. When he could get an hour in solitude, he devoted it to his writing, and worked with a speed, a certainty, an intensity and absorption rarely equalled. Page after page was pushed away from under his hand, without pause of any kind, until his thought was completely expressed.

A Study in 20 foot contour lines, of the Structure and Erosion of a part of the Lower Silurian Iron-ore Region north-east of the Little Juniata River, in Huntingdon and Centre Cos. Pennsylvania.
To illustrate a Report on the Mines of Lyon, Short, and Co. of Pittsburg: by J. P. Lesley, Prof. Geol. Univ. Penn.
Field-work by Franklin Platt, of Philadelphia.
Tyrone
Scale.
Key List of the Iron Ore Mines on the Map.
1. West Petriagloy.
2. East Petriagloy.
3. nameless.
4. Beck's.
5. Town.
6. Bumbarger's.
7. Bennoch Furnace.
8. Waite's.
9. Braunstetter's.
10. Zeer-boen.
11. Tyler's
12. M.Kinney's
13. Kennoch Nº 2.
14. Bull's.
15. Pond. Nº 1.
16. York
17. California.
18. Reider's.
19. Wheeler's.
20. Pond. Nº 2.
21. Wyer's.
22. Sieen's.
23. Little Dry Hollow.
24. Dry Hollow.
25. Keen's
26. Brewster's.
27. New M. Reeder's.
28. Keeler's.
29. Pennsylvania.
30. Old Seat of M. Furnace.
31. Huntingdon Furnace.
32. Sarsey Ore Banks.
Skeleton Map, giving the names of the principal ridges, valleys and streams of the Ore Region.
Bald Eagle Mountain.
Nittany Valley
Tussey Mountain
Broad Top Coal Field
Terrace of L. Middle Silurian
Crest of Tussey Mountain

STUDY OF STRUCTURE AND EROSION OF LOWER SILURIAN IRON-ORE REGION

FOLDOUT

After such an hour (or hours, if he were fortunate enough to have them) he would seek an entire change of thought. Usually, he came away from his study, lighted his pipe, and dropped into a book of history, or biography, or more often of Egyptological research.

In the afternoon he religiously devoted two or three hours to his club, the Union League, playing billiards with friends who did not remind him of his work.

When one remembers that these twenty years of most arduous and most productive work came after a very complete nervous breakdown, with serious indications of brain sensitiveness, it seems little less than marvellous that he should have accomplished what he did.

His being able to carry on the work so long was due, no doubt, to his great strength of constitution, to his variety of intellectual interests,—hobbies, in short,—to his daily games of billiards, and to the periods of more or less entire relaxation, which he took from time to time, in short trips to Europe.

It was not surprising that at the end of these twenty years a second breakdown occurred, from which no entire cure could be hoped for, since he was then a man nearly seventy-five years old.

Friday P.M., Jan. 16, 1874. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . Last evening we had one of those rarely beautiful occasions, that occur to no one oftener than three or four times in life. William and Maria Silsbee turned up at the Continental, and I invited them to tea. Just after, Mr. Frederick Frothingham and his wife turned up from Buffalo, and I invited them, and Dr. and Mrs. Ray, with whom they stayed, to come. Dr. Ray is the distinguished writer about insanity, I believe. Then I telegraphed to Mr. and Mrs. Ames to come in from Germantown, and sent for my good Mr. Smythe, the Methodist prison preacher of whom I told you. Mary had a lovely tea table, and Jane made a splendid supper. They all came, and seemed so glad to see each other, so happy and animated, it was a perfect pleasure. But in my life I never heard a more brilliant conversation, and upon the highest themes. Such a mingling of seri-

ousness, wit, pathos and good humor, I never heard before. The women were as bright as the men, Mrs. Ames and Mrs. Frothingham both people of uncommon intellectual power. Peter came home very tired, but waked up to the occasion, and said when they had gone, he didn't know as he ever had such an evening in his life. One seemed lifted into an upper air, and the remembrance will sweeten many a common day. The Frothinghams have gone to Boston to-day, the Silsbees to Florida. Mr. Smythe thanked me in the warmest way. Everybody was delighted with him, and asked who he was; and as for him, when he went out, he said, "Why, Mrs. Lesley, I never saw such people in all my life. I never had such an evening."

Feb. 1, 1874. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . The Sunday evenings that were formerly spent at Professor Frazer's have been transferred to Fairman Rogers', and there the same set and some others often meet. On Friday evening, Peter read a paper before the Social Science Association, and Mary and I went to hear it at the Mercantile Library Hall. It will be printed in the *Penn Monthly* and I will send it to you. This week he is to lecture at the Franklin Institute, on some Geological problems. I am sorry to have him have these extra things to do, when his daily work is more than enough, but there seems no help for it, and it is wonderful how much he can get through, without any worse consequence than temporary fatigue. To-day . . . I read aloud to him in the "Personal Recollections of Mary Somerville." We all had a lovely time over it, it is the most enchanting biography I have read in years. . . .

HOME, *Feb.* 21, 1874. PETER LESLEY TO HIS WIFE.

. . . Yesterday was successful also. A.M. made up my paper; wrote editorials for next week; pacified young Y.; consulted with old H. on Virginia Geology; wrote, after consultation with W., a new bill for the Legislature to pass for a Geological Survey; and prepared at the Library for the meeting. . . .

PHILADELPHIA, *July* 5, 1874. TO HIS WIFE.

. . . Do you perceive and lament that my letters have become mere commonplace allusions to events, things and persons? I am at length immersed in affairs, so that there remains out of water not even one little lock of hair, by which Gabriel can take

me up and transport me to see the Chambers of Imagery. Perhaps a short three weeks among the Cathedrals may save my soul from utter extinction. . . . My brain seethes with designs in connection with the Survey. I must print tables, instructions, textbooks for the assistants; letters to the public, descriptive of the methods and fruits of a survey; specimens of work done, to serve as models, so that the whole may be harmonious.

On July 13 my father sailed for Europe with one of his daughters. He wished to purchase for the survey certain instruments of precision. He visited Rotterdam, Zürich, Paris, and London for this purpose, and returned home the end of August, having accomplished his desire.

Returned to Philadelphia, my father plunged at once into the active direction of the survey, going in September to Harrisburg to examine the survey laboratory, and then into various parts of the State, to visit the parties which he had sent out.

MAGNOLIA, *July* 8, 1874. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Then the girls go to take their sea bath, and I take to your grandmother's letters, which it is indeed a serious labor only to read and arrange, let alone selection. I am rewarded however now and then by lighting on something so quaint and characteristic that it delights me, or some record of a past so picturesque and sweet that I ought to have an angel's pen to do any justice to it.*

PHILADELPHIA, *Oct.* 30, 1874. PETER LESLEY TO HIS BROTHER ALLEN.

. . . I am delighted to think I shall soon see you. . . . I am too busy to go down to see you in Delaware. You must come to see me, and let us talk together. I trust you will come (as they say) to-morrow. We have a room for you. You shall be at liberty to go and come and do as you choose. Dr. Sterry Hunt, the Chemist of the Canada Survey (now in Polyt. Boston), a man of European as well as American reputation, and an intimate friend of mine for 30 years, comes to-morrow evening to be our guest until next Wednesday. You will like him extremely.

* My mother had begun to collect material for the life of her mother, published several years later.—EDITOR

My dear old friend, Dr. Henderson (the loveliest fellow alive), one whom you would delight to know, comes to spend next week with us. H. is senior surgeon of U.S. Navy, and in charge of Laboratory, at N.Y. in place of Bache. He is a great mechanical inventor also. I expect next week also, to stop with us a few days, James Hall, the Palæontologist of New York, who is making up for me a complete museum of fossils for the University. To see Hunt and Hall, is to see the spirit of American Geological Science. Do gratify me by allowing me to enter these men on the list of your friends. Come and spend a night, or two or three, or the whole week with us, and enjoy it.

Then on Sunday evening, you shall go with me to our rendezvous, in Fairman Rogers' study, where you will meet Genth, König, Sadtler, Professors in the University, Clarke, the Phœnixville bridge builder (built the parliament houses at Ottawa), John Le Conte, a genial naturalist of the highest order of mind, Winsor of the steamship line, Delmar of the Census (Editor of the *Age*), Barker, the physicist, a jolly dog, and the new life of the University, Nicolls, a sweet spirit in a sweet face, a Charles Lamb with a difference, and perhaps one or two more. I *must* have you there. It is dear old Jack Frazer's party, transferred to Fairman Rogers' house.

Then Leidy will come to talk with Hall and Hunt, and you can crack with him. He is absorbed in his new discoveries of rhizopods in the cracks of the city pavements.

Then on Tuesday, the National Academy meets in the Chapel of the University, and Peirce, Loomis, Hilgard, etc., etc., will mix in the mêlée. Our Board of Commissioners Geological Survey meet that day at Harrisburg, but I shall return at night, or perhaps the meeting will be postponed.

But I want you myself.

My long letter to you addressed St. Thomas is on its travels, heaven knows where.

PHILADELPHIA, *Sunday Eve, Jan.* 7, 1875. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . Peter has just gone to his usual rendezvous at Fairman Rogers'. . . . I thank heaven for my peaceful home, and freedom from heavy cares and anxieties, and for ten thousand blessings, too numerous to mention. I think this winter has been one of the most enjoyable of my life, and that I have had fewer interruptions since November from weakness and headaches, than for several years. I lead a very regular life now, have two excellent,

reliable girls, who make the domestic machinery move with ease, and give me time for other things. Every morning, I go down to the Library. One hour I spend over Mother's memorial, three on the Catalogue; the last grows steadily, the first only slowly. But I can't tell you how much it interests me, and when you write me that you are destroying old letters, it makes me feel sad. For I can't tell you what a delightful thing it is to me to read over the records of the past. And in this effort to recover something of Mother's earlier life, I have found all the persons and things connected with it so interesting, I can only regret that I can find so little about them. Not to put them into her life, but for my own personal satisfaction. I hope you will keep some of the old things, and read me what you are willing to, next summer. . . .

. . . Peter has been gone to Harrisburg two days out of the last week, to meet the Board of Commissioners, and hand them his Report of the season's work. His own history of the Survey, with the reports of Assistants, making seven hundred pages, is now going through the press. . . . But he has written a shorter and condensed report for the Board, of fourteen pages. . . .

Jan. 20, 1875. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . Peter is very well, though thinner than ever. He is not aware of it himself, but his work since September is enormous. He is now lecturing at the University four times a week, giving a great deal of extra time to the boys, who are a charming set, and perfectly devoted to him.

March 2, 1875. TO THE SAME.

. . . When I got home, I found Dr. Henderson, but Peter kindly read aloud all the evening, in a book that interests them all very much, called Supernatural Religion. It is really a very fine and searching analysis of the four Gospels, written in the best spirit by some unknown English author [Seeley?], but upsetting many of our old ideas. He places the Synoptics on far surer evidence than the fourth Gospel, does not believe that John wrote the fourth Gospel at all, or that it was written before the close of the second Century. Peter thinks his arguments are masterly, and I have enjoyed hearing his talks with the girls over the book, although I would have been sorry to have them read it alone. But this is an age that brings everything into the light

of criticism, and we cannot avoid the young hearing it. So it is perhaps as well for them to see, that nothing but moral and spiritual ideas have any sure basis, and that *they are* eternal. . . .

PHILADELPHIA, *April* 7, 1875. TO THE SAME.

. . . Mr. Emerson and Ellen took tea with us. . . . We had a perfectly quiet home time. . . . He has become an old man, but I think I never saw him more entirely lovely. That gentle kindliness that I think crowns the old age of the best people, is most apparent in all his conversation, and if his memory is feebler, he certainly still remembers more that is worth remembering than most young people. . . .

Ah! I have been writing on, hating to speak of the event that made yesterday a dark day to us. Our dear friend Dr. Henderson died on Sunday. I shall always be glad to remember his last two visits here. . . . Last evening, I had to leave my letter to go up to poor Miss L.'s, and just as I was leaving the door, came the telegram to inform us of the death of our dear friend Mr. Towne, in Paris.

Peter has been very much overcome by both of these deaths, and we talked late last night about them. Poor Henderson has gone from an unhappy life (his wife's death had left him desolate) to a sure rest. But dear Mr. Towne was the centre of so many interests, the reliance of so many hearts. There was never a flaw in his friendship for us, and I shall never forget all he was to us in the time of our sorest need in Paris. No brother could have been kinder or more considerate. . . .

PHILADELPHIA, *April* 25, 1875. SUSAN I. LESLEY TO THE SAME.

. . . Peter came home last Sunday evening, and told us that Mr. Hinckley, who is head of the road from here to Washington, had offered his private car to the members of the National Academy, who might like to go to the meeting at Washington, and he had specially invited Peter to take his whole family. Peter had been expecting to go to the meeting, because it was very important for him to see certain members of the Coast Survey in reference to the triangulation of this state, but I had not thought of accompanying him. This, however, seemed such a splendid chance, that I at once resolved to go. We had a lovely Parlor Car, in which were Mr. Hinckley, Dr. Weir Mitchell, Dr. Le Conte, Col. Biddle, Prof. Guyot, and our four selves. We had a colored waiter on board, who at one o'clock set a table

and provided an excellent lunch. The gentlemen had a great deal of interesting conversation, and we enjoyed listening.

. . . Peter and I attended all the meetings Tuesday and Wednesday. He gave a very interesting account of the Survey, and showed a good many maps and sections. Guyot also read a very interesting paper, but the others I could not understand. The Henry's were very polite and kind, and I lunched with them both days. Miss Dix was staying with them, and sat by me through the meetings. I missed so many of the old faces, Agassiz, Bache, Gould, Peirce, and others. It is six years since I have attended a meeting, and the changes are a little melancholy. But Professors Henry and Guyot are venerable and lovely, and I am glad there is anything of the former time left. We left Washington on Thursday noon, and Peter spent the whole morning at the Coast Survey Office, where he accomplished all he wanted.

June 12, 1875. PETER LESLEY TO HIS WIFE.

. . . To-day I had a consultation with Mr. Vaughn Merrick about $10,000 worth of apparatus. Then at the A. P. S. rooms, sending an account of the origin of the Society to President Barnard. Then at the University. . . . I have finished Prime's big map, and written an appendix to his report. I am now at work fixing up Platt's report, and contouring his two Red Bank Maps. Multitudes of letters require attention. To-morrow, Prime arrives for a consultation. Wrigley arrived to-day. I have just dismissed [Charles] Allen, who has filled three and one-half volumes with R.R. levels,—and to-morrow begins on the Reading R.R. levels. Long talk with Barker. . . . Have got two reports from Ben Lyman, one of which is exceedingly interesting, a diary of everything from May 4, 1874, to November, 1874, and his exciting discoveries in the mountains. He has weighed, measured and examined the Ainos, and says they are no more a hairy race than the ——s are. He thinks them Papuans.* A. P. S. meeting next Friday, and then perhaps I can run off to Magnolia.

PHILADELPHIA, *June* 25, 1875. PETER LESLEY TO HIS DAUGHTER MARY.

. . . This letter-writing is a tremendous duty. If I could fulfil it to one or other of your separated parties, it would be

* Mr. Lyman was in Japan for nine years, making certain important government geological surveys.

easier. But I should sing "if t'other dear charmer," etc. *C'est un embarras de richesses.* I sit at my lovely new desk [which had been that of his friend Henry Towne] and wish Mrs. Towne could know half the sad pleasing comfort I take in it. But I miss its master, more than I could describe to you. I sometimes think I can feel his shade walking about my study, and turning to me with that lovely and loving smile, which I never failed to get whenever I approached. The great treasures of earth are dear friends, endeared by years of perfect good will and good understanding, friends in whose faith one relies, in whose intelligence one confides, whose sympathy is a reservoir of comfort always full, and whose faces are mirrors, in which we may behold our own best ideas realized. And next to such living friends, are such friends departed. Their shades are beautiful. Though dead, they still speak. Though the body moulders, the spirit still exerts power over the living. If when I am gone, men shall think of me as I think of him, I shall be happy to have lived.

PHILADELPHIA, *June* 26, 1875. PETER LESLEY TO HIS WIFE.

. . . Yesterday, Ashburner came to report. He is very bright and has stuck several tall feathers into his cap at Orbisonia. Reported to me with great glee a dozen "baby coal beds," in the tunnel through Sideling Hill, in No. X. A great discovery, and very important in its bearings on general American geology. I have just written Dana about it. . . .

PHILADELPHIA, *June* 26, 1875. TO HIS WIFE.

. . . Your letters will never lose their charm. And evidently what I say of them, your friends say and think of their writer. *You* will never grow old, let all the world be decrepit. *You* will always receive a welcome, whoever else be voted bores. For *you* a highway has been prepared leading past many a palace Beautiful, through no Valley of Humiliation, and yet to the Heavenly Country. *You* have no lions—no pope—no giant despair—no Demas and Two-face to encounter. Happy young old girl! And happy the man you chose, when a young girl, to be your husband in old age! *I* have had all these lions and giants, and Plausibles; Mr. Law to knock me down and Mrs. Despair to offer me poison, Apollyon and Great Heart—I have gone through it all—the enchanted land and the river of death, in advance of the time. And I bless God for it all, and would wish nothing changed, even my errors; for they have been manure to the roots

of the vine. Yet, when I read your letters, I see that a perfect character can be educed from a very different soil by a very different culture. All persons do not need to go through the same experiences. I suppose there are children,—rare little chaps—who never have measles, whooping-cough, mumps, or any of that sort of thing. And there are souls who seem to have no impurities of constitution, to need natural purging. Well, great is the mystery of Godliness,—God manifest in *our* flesh.

I follow you round from one dear old, well-remembered point to another—Jamaica Pond, Milton Hill, Brush Hill, Canton, Pinckney Street, and know well how to translate all your expressions of pleasure at seeing our old friends;—who no doubt—as you say remember me kindly, and whom I remember with constant affection. I trust you give them all my love. Please to tell Susan Bulfinch [Lyman] that it is a cross to me not to be able to visit her this week, for I think without vanity that it would add to her pleasure in your company to have another added, who loved what she loved so dearly [Joseph Lyman]. I sit every day in his chair, and can see his face from my bed. Every motion, and gesture, and tone of his voice, the way he tossed his head and looked down, as he walked, and that ineffably sweet smile which embodied the delicious goodness of his nature; the very tone in which he expressed disapprobation, tempered with complete consideration for what he seemed to think inevitable misinformation in others,—I have a perfect picture of it all, and it leaves in my heart no pain for his loss—only a great want, and sometimes a great yearning to see him again, and tell him all that has happened. . . .

PHILADELPHIA, *Sunday, June* 27, 1875. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . The Church bells are merrily ringing their crown-shaped necks, and tossing up their iron tongues like bulls of Bashan, to persuade the citizens to turn out into the hot streets—and fan themselves, and doze in hotter pews, listening to stories of hell fire hereafter. I prefer to entertain pure and sweet thoughts in my lonely, lovely home. "The time cometh when ye shall worship God neither on this Mount (Gerizim) nor yet at Jerusalem, but in simple spirit and truth." And yet, in the name of the Master who uttered this prediction, have arisen the domes of Florence and Milan, St. Peter's, St. Paul's, Cöln, Rheims and Bourges, Metz, Leon, Canterbury, York, Burgos and Toledo, and a thousand pilgrim shrines on as many mountain tops, where priests

promise in reward of coming, the remission of sins, and where people throng to worship God in the flesh and in the falsehood. Happily for you, dear child of a dear mother, the spirit of the upper room of the disciples at Jerusalem has presided over your birth and education, and you are at liberty to worship the Father in spirit and in truth, in all the assembling houses of Christians. I trust that you are drinking in fresh draughts of the strong and pure water of Christian life to-day.

For myself I find the Water Commissioners incompetent; and so I dig my own cistern, and let the accidental former and latter rains fill it as they may.

The South wind blows the smoke of my pipe out at the front window as I write. That is a volume on meteorology; and also on the goodness of God, who has ordained that when the fruits of the earth are held back by a late spring, they shall receive compensation from a hot summer. You never saw a more gorgeous land of plenty and beauty than I travelled through last week, around the east end of the South Mountains. No Brussels carpet was ever richer in varied figures and colors, although strong contrasts were eschewed by the perfecter taste of the Divine weaver. It is only in the last flurry of winding up the year, that reds and yellows and greens are allowed to paint themselves side by side.

Now the organ sounds, and a heart-touching hymn rises and falls on rapid-swelling cadences, like breakers hurrying to shore. I love the music of the church, I love the people who sing together in the church, I love to think that my solitude here is an innocent pretence, inasmuch as I go heartily with two or three millions of men, women and children, who began to sing and pray together seven hours ago in Germany, and have been keeping it up ever since in Holland and Switzerland, France and Great Britain, Nova Scotia and New England, and will continue to sing and pray throughout the continent this morning for five hours more, until noon strikes in San Francisco. By which time the vesper service will begin in Europe. . . .

PHILADELPHIA, *June* 29, 1875. PETER LESLEY TO HIS WIFE.

. . . This morning the South wind has set in again, and the Lord Indra will have to do his job all over again in a day or two, or send a lot of Maruts to hide the Sun from us. What a superb bow of promise was hung across the east yesterday! Two bows, in fact. If the writer of Genesis lived now, he would think that

the beautiful promise was becoming rather a case of tautology. Certainly people have long ere this ceased to need one; and undoubtedly the Cephalopods of the Silurian age, and the pterodactyls of the Mesozoic, opened their big eyes on as beautiful rainbows as we gaze at now.

You don't know how I revel in my empty home, and undisturbed condition. I work from eight to ten hours a day, and am perfectly well; begin to have clear skies in my mind; and don't want to die any more. In fact I have been fed too high for six months with "society, friendship, and love, divinely bestowed upon man" to wear him to skin and bone, so that my soul's liver was in the condition of an old Calcutta merchant's. It is fast improving, as you may guess from the nonsense I mail to you every day at three cents a page. . . .

PHILADELPHIA, *July* 1, 1875. TO HIS WIFE.

. . . My own regular and sedentary life makes your gyratory existence an object of wonder and admiration. Just now, all the winds that blow on me are mathematical and financial. I am in the thick of the monthly accounts. My bank book rises and falls from hour to hour in fearful oscillations, like a thermometer or barometer in a storm. It is a nice job to keep straight track of all the dollars going and coming, drafts, vouchers, checks, endorsed and re-endorsed, returned, deposited and recorded. . . .

FAIRHAVEN, *July* 4, 1875. SUSAN I. LESLEY TO HER HUSBAND.

. . . Yesterday I took down an old Bible containing the Apocrypha, and read "The Wisdom of Solomon," and "Ecclesiasticus," and noted down some quotations for my book. I do not remember if I told you that the Sunday before, which I passed mostly with the Hillards, I read to them a portion of my memorial, and Mr. Hillard helped me with valuable reminiscences. I could not help being pleased, too, at his cordial commendation of what I had written. He said it was a true picture. I find myself often much absorbed in it, even when in conversation with others. It is now nearly three months since I have written a word on it, and it requires some patience to stem the teeming thoughts that either repeat themselves continually, because not written down, or are forgotten for the same reason. . . .

EAGLE HEAD, *July* 8, 1875. TO HER HUSBAND.

. . . Yesterday I read thirty-six of my Mother's letters to Cousin Abby. How they took me back to the bright and glowing period of her life! I was overcome with emotion at the deep insight they gave me into many of her early trials. . . .

PHILADELPHIA, *July* 8, 1875. PETER LESLEY TO HIS WIFE.

. . . I thought over your present work, and fully entered into your feelings about it. I think I appreciate it and its occupancy of your mind and heart, and I believe that when you see your Mother's memoir in print, you will realize one of the purest and completest joys of your life. You are precisely fitted for such a composition and the slowness with which you mature it is the best guarantee for its good issue. Do not be impatient. Great trees always grow slowly, and those which grow slowly have the firmest and cleanest grain. I admire this mode of your work the more, because all that I do must be done in haste under pressure, and what I would gladly put into the text I must add in footnotes, and correct in appendices, which is like shoring up feeble trees. . . .

PHILADELPHIA, *July* 9, 1875. PETER LESLEY TO HIS DAUGHTER MARY.

. . . My wife is gone, my children have gone, my knife is gone, my pen is gone, my spirits have gone, and everything but myself is gone, and I cannot go. It seems like a nightmare, when one tries to run after a crowd and can't make a square an hour. Well, all things move in a circle, and if I only remain still, everybody will come round back to me again. And I shall even find my poor old knife and worn out pocket pen again.

Oh, how hot it has been! To-day it is comfortable and to-night cool. If I didn't hanker after the cars (N.Y. Division Pa. R.R.) I should get on well enough. But I consider it cruel to have you two weeks at Brush Hill and I prevented from going thither. Some day there will be an advertisement in the *Ledger:* "If any one can give any information as to the whereabouts of a State Geologist, his afflicted corps, printers, artists and well-wishers will be duly thankful." In fact I am not consoled by just receiving two of Cousin Ben's Reports on his Survey of Yesso, with a letter of introduction for General Capron. Your Uncle Allen is bent on visiting Ben at camp. I have just finished "Miss Angel." She marries Antonio, and everybody dies, leaving me plunged in solitary misery; your affectionate happy father.

One of his daughters having asked him the question (suggested by hearing Lowell's oration on the celebration of the 100th anniversary of Washington becoming head of the Revolutionary Army), "Do you think, if Washington had not been on hand at that time, no other man would have risen to take that place?" he answers:—

My darling young philosopher-ess! The question you so gravely put at the end of your welcome and lovely note of Saturday and Sunday last—(all the more lovely to your father's eyes because the handwriting so closely resembles that of your dear mother, that I was deceived about the hand that held the pen until I saw the signature)—the question you propose, is one which everybody has put to himself or to somebody else, at a certain stage of growing intelligence, and again and again many times afterwards. In fact it is the standing conundrum of historians. If A had not been there to lead the army, would his substitute B have won the victory? If Shakespeare had not been born in Queen Elizabeth's time, would there have been another Shakespeare, in that or any other age? If Harvey had not discovered the circulation of the blood, would the world have had to wait for Leidy to do it? And would Leidy have done it after, or before, he made his great discovery of the function of the liver? The question can be thrown into ten thousand forms. To the *young* man and woman, however, it comes in a tremendous shape, thus: If I don't get Susan Thompson, will I ever see any other girl whom I can love and marry? Or, if I don't accept John Tompkins, will I have another chance to enjoy a married life?

Dear girl of my heart, let me tell you out of the experience of many years, that the question is a mischievous Puck, who does not deserve an answer; and certainly, neither you nor I can ever invent one. The Lord only knows such things, and it is none of our business. Washington was wanted, and Washington came to hand. For a long time, a great many people thought that Providence and the Continental Congress had made a great mistake in asking Washington to lead the revolution. But the end justified them. . . . In fact had the revolution been postponed a dozen years or more, for want of a Washington, supposing that possible, it would have come sooner or later, and no great difference made in our history anyhow, except the postponement of the hurly-burly of 1876 to 1886, or 1896.* . . .

* A reference to the coming Centennial Exposition.

PHILADELPHIA, *July* 13, 1875. PETER LESLEY TO HIS WIFE.

. . . I read your dear Mother's letter, and don't wonder it made your tears start; such letters are sad enough. The past is sad, the present is sad, the future is sad. But let us thank God that the children are not sad. Let us renew our lives in them. My life is like a river; its beginnings too full of cascades and dead timber; its present broad and deep, but too crowded with craft; its future wider, shallower, full of sand-bank, marshy shores, and a great bar at its mouth beyond which it will be lost in the sea. Yet I lie awake at night and repeat the twenty-third Psalm and get strength and take comfort. Thou restorest my soul. My cup runneth over; surely goodness and mercy shall follow me all the days of my life and I shall dwell in the house of the Lord forever.

PHILADELPHIA, *July* 14, 1875. PETER LESLEY TO HIS DAUGHTER MARGARET.

If you call me a trump, I'll call you a brick, and so be even with you; only your epithet is honorable and I am afraid that mine is etymologically doubtful on that score, and therefore I retract it, until I know better its origin. The trump is evidently not connected with either the angel Gabriel or the Angel Michael, but rather with Queens and Kings of hearts and clubs. The honorable is of course confined to the circle of piquet players, eucherists and whisters—an extensive sept or guild or gens (as the Romans would have said), not recognized as legitimate children of grace by Michael and Gabriel and their following. Language is as curious as Vegetation, and must be studied like Botany. Where the seeds come from and how they get planted by nature no one knows; but from the earliest sprouting, the plant words can be studied and it is a delightful recreation. It is useful too; for it opens our eyes to the real meanings of words, keeps us alive to the genuine and elegant and forcible idioms, enables us to write the "English undefiled," adds point and pith to our expressions, and far more than all this opens vistas of thought and reasoning which are habitually closed to those who use common words without consciousness of their real meanings. Slang is only the natural effort of human society to put life into words. If people wrote old English, good English words, with a profound knowledge of their true and original meaning, they would feel no want of slang words to satisfy the natural craving for *living* words. It is a pity that so much of the fine literature

of our language is too savage, stupid or dirty to be read. Hence the value of Johnson, Young, Milton, Macaulay and a few others who write well, and purely and morally and nobly at the same time. *Milton's prose* is the best of all our sources of English study. . . .

A week at Naushon Island, among the Forbes cousins, where he joined my mother later in July, was a great rest and refreshment to him.

PHILADELPHIA, *Aug.* 14, 1875. PETER LESLEY TO HIS WIFE.

. . . I fell away from grace this afternoon, lost courage and hope, and longed to end it all; thought the burden was too heavy to carry any further; saw no resting place ahead, imagined old age, decrepitude, poverty, dishonor, in the near distance; no friends, no help, no pity; nothing laid up for you and the children; the land getting crowded for them, and lonely for you; friends and acquaintances dying off; work increasing, responsibilities become weightier, and no monuments finished yet; the orange of science sucked dry; the poetry of my life evaporated; all my hobbies dead, not one to take a little ride on; and all that. The lake rough; the sky dark; Peter sinking, and no Jesus near.

I was bewildered with plans to remedy this evil state of things. But no plan seemed in the least feasible. A cell; chains; grated windows; and no file.

I suppose this ugly train of thought was started by my discovery this morning, that the first volume of my manuscript on the First Six Dynasties of Egypt was missing from its place. The Second was there. I spent an entire hour searching every shelf and drawer and box. I cannot imagine where it is. I never lent it. Some one must have fallen in love with it. But who? Could my old friend W——, who was so fond of it, have borrowed it and lost it among his papers? I had the wildest conjectures.

How often I have petulantly wished a fire would burn up my ten thousand pages of manuscript! to permit me to begin again; to free me from the incubus of indigested learning. The pain I have suffered to-day from the loss of *one* book, only one, and one which I could rewrite much better now in six or eight weeks of uninterrupted labor, teaches me the folly of such a wish.

But what folly to value such things; and what folly to long for leisure to write about the dead six thousand years ago, when

I have such a burden of present interests to carry, and am so ill-equipped for its carriage! But I get so tired of the dry facts and tedious statements of my science! This restless wheel of publication round the year, which never stops! This exaction, soon to commence again, of hours and lessons and discipline! My holiday is nearly over. And what a holiday! Others go off at Commencement Day, and think no more of it until September. But on the other hand, poor Haupt is hard at work all summer. Barker is busy, I suppose. The Hardens get no holiday but what I manufacture for them. Poor Genth is every day in the laboratory, one of the greatest sufferers I know,—a very sick man I am afraid. König works like a dog. All my assistants in the field work straight along. My artists, and compositors, and proof-readers, and pressmen get no more than one week in the year. I meet thousands of people on the street, who have little or no holiday throughout the year. Multitudes are sick, or have their vacation spoiled by illness in their families. My brothers have no let-up in their offices. Aleck is dying, I fear, for he seldom gets out of the house at all now. The world is full of privation, pain, sorrow and toil. Why should I complain?

Nor do I ever feel disposed to complain, until the close of the day, when my forces fail. Every morning I rise refreshed and strong, and full of life, and work five or six hours with perfect cheerfulness. It is therefore a small bill to pay to the body, to be a little restless, hopeless, or unhappy, for an hour or so after supper; especially as it is not caused by any illness; for I am perfectly sound and well. . . .

PHILADELPHIA, *Sept.* 1, 1875. PETER LESLEY TO HIS WIFE.

. . . I long to be called upon to express some grand old thoughts once more. But for this, one must be emancipated from petty routine labors. But were I to neglect these, how many would be sure to suffer! After all, there are a thousand forms and modes of self-sacrifice besides those glorified in the *Acta Martyrorum.* To set one's foot steadily on one's desires and keep them down for the sake of fulfilling the duties of each day, is surely pleasing to the All-Father, and is within the reach of the least gifted and most humble of his children. At the same time no man can exonerate himself from the duty of cultivating his best talents, by urging that these or those daily duties are expected of him by other people. He must judge where lie the fine limits between what he owes to the hours and what he owes to all time. I am trying therefore to make the Survey automatic,

so that I may be freer for the more difficult and delicate functions of the head of the Survey. I have much to think, study and write; and if I do all the drudgery I become incapable of investigating, reflecting, and expressing in a large way, the results of the Survey. . . .

The death of their old friend, Chauncey Wright, in September, was a great grief to both my parents. My mother writes of the last days and the funeral, to which my father answers: "Your account of the funeral services and all was touching. We are all like fellow-travellers on a crowded ship. John Le Conte's address before the Association at Detroit is noble, and I rejoice to see the native power of such a man thrown into the scale of spirituality and against materialism."

PHILADELPHIA, *Jan.* 20, 1876. PETER LESLEY TO HIS WIFE.

. . . I had a lovely hour with a select ten of my Seniors this morning, over the history of the geology of New Hampshire; and I told them anecdotes of Charles T. Jackson, Josiah D. Whitney, the Braintree trilobite, etc., and gave them lots of moral advice against impatience, envy and all uncharitableness; and their fine unspoiled young faces beamed intelligent sympathy with all I said. It is a lovely task to sow Christian seed into the rich soil of the heart of youth, and pluck up the tares which spring from Society, life and science. A few such opportunities sanctify a term, and pay for all the fatigues and anxieties of a course of lectures. . . .

When I get tired of task work, I read my "Neue Kambyses." It is full of the most interesting things. Dear old Lauth continues to discover. I shall get Brugsch to tell me a lot of things which I doubt about, in this paper of Lauth on the Hamamat hieroglyphics. I have found accidentally this evening the explanation of our printers' *Vinculum* ⎰. It is immensely old; in fact nothing but the ⁀ or extended arms which the Egyptian priests used to signify the *summation* of a set of Kings' reigns, thus:—6 + 23 + 5 ⁀ 34. Or as we would write it $34 \left\{ \begin{matrix} 6 \\ 23 \\ 5 \end{matrix} \right.$ Isn't that pretty? I learn also that a *Jewish* writer, 100 B.C., had a *Persian* name (Arta-banes). This is one of the things that

suggest the way by which our Christian scriptures (N. T.) got such a dash of Zoroastrianism.

PHILADELPHIA, *Jan.* 22, 1876. TO HIS WIFE.

. . . "The Newcomes" have been a dead failure (as family reading). This is the second time I have tried to like, to endure Thackeray. Once before I reached the fortieth page of "The Newcomes." He is simply detestable. His Colonel won't save him. He violates his own expressed canon of literature, not to force his readers into close company with characters which they would not invite a second time to dinner. He is the type writer of the degraded side of modern civilization, that which accepts the bad as equally natural and inevitable as the good; that which slurs virtue and excuses vice; that which pronounces every fruit in nature's dish a little rotten, and prefers game to be "high." I protest against it all and always. Our business is not to hold up the glass to nature; but to hang the images of sages, saints and heroes, on our chamber walls, that a reflection from their loveliness and nobility may give a hue to our own existence. Life is too brief to spend a single hour in intimacy with the ignoble of either fact or fiction. So we have abandoned Thackeray, once and again, and forever. . . .

PHILADELPHIA, *Jan.* 25, 1876. TO HIS WIFE.

. . . The last hour has been spent stifling our emotions at Charles Reade's dramatic narrative, to the saving of Chairles by Christie, and in looking forward and upward (and backward by me), as he winds up the lovely history with his panegyric on marriage and old age. Oh, the royal charter of the true writer! He only is King, and all mankind his thrall subjects. Could I but leave but one book over which ten thousand eyes would flash and moisten, and ten thousand hearts throb and grow stronger and better, I should die happy. Science is not philosophy—statistics do not constitute wisdom, nor can one manufacture beauty out of Euclid and Laplace. Yet why should the low-born envy these Kings? The world has but few such prizes to bestow as geniuses win. Let us be content, for in contentment there is great peace. I got another chance this morning to urge my Seniors to be thinkers, and not "scientists" (and here this odious word comes pat),—gentlemen to boot—in fine, Christians; to learn that, as no department of knowledge is independent of the others, and as the sciences balance and supplement each other,

so the physical, mental and moral natures of a man must be equally and harmoniously developed. It was on occasion of my description of the geological structure of Southern Virginia, after I had shown them in colors the difference between the "rich" and "poor" valleys; in those, wealth and slavery,—in these poverty, freedom, love of the Union, and help and concealment for the escaped prisoners of Andersonville. Thus geology, agriculture, social science, political principles, are woven in together. . . .

PHILADELPHIA, *Jan.* 28, 1876. TO HIS WIFE.

. . . So here I am [alone], fed with scrambled eggs by Sophie at supper, and by the marvellous pretty tales of Hatim Tai, Prince of Yemen, after tea. These tales of demons, mermaids, dragons, old men of the desert, lovely princesses who will only give themselves away to him who answers their three or seven hard questions, are as bewitching to me now at fifty-six as they used to be at sixteen. Why not? Age falls on the nerves and muscles and bones and hair, and beard, and organs of generation, digestion and secretion, but not on the fancy, on the reason, the sentiments and affections of the soul. Perish the thought! . . .

CHAPTER XXVII

Educational and Reform Work. 1876–1878

In the spring of 1876 came the Centennial Exposition, a great event in many ways for Philadelphia.

Every large city has its own characteristics and its own peculiar atmosphere. Philadelphia had always been (at least by comparison with its greater neighbor, New York) a quiet place. As it became an immense manufacturing centre, its population naturally distributed itself over a wide territory, and established itself in village-like communities wherever the great factories and workshops were to be found. Each of these was chiefly interested in its own affairs, and to a large extent ignorant and careless of those of its neighbors. From this condition of things it followed that there was less unity of interest in public affairs in Philadelphia than in most other large cities. From time to time great public events had stirred the whole body of citizens to united action, as when the war interests of 1861–65 stimulated them to join in the great work of the Sanitary Commission; but, after such exciting periods, the city generally subsided into its usual condition of inertness and indifference.

In spite, however, of this lack of a generalized public spirit, there has always been a great deal of private philanthropy, expressed in many wise charities and in much efficient and unostentatious benevolent work. The Quaker virtues of simplicity, honesty, exactness, and neatness, have impressed themselves on the life of the city, and its institutions.

From the beginning Philadelphia has always been an abode for real workers in many lines. Here science has flourished from the days of Franklin to the present time; and many a man distinguished in foreign lands has lived

almost unknown in his native town, quietly working out problems of universal interest. Here Art has had a congenial home, since Benjamin West first robbed poor pussy's fur to meet the exigencies of his infant genius; and the old Academy of Fine Arts has sent out many famous artists into the world.

When the Exposition of 1876 was decided upon, the enthusiasm of the population was slowly but effectually aroused, and working committees were organized in every part of the city. This was the best method of interesting every one, and the foundations were laid of a broader public spirit, which showed itself two years later in the efficient formation of the Organized Charities, when Philadelphia was among the first of American cities to establish such an association. But I leave the mention of that movement to a later chapter.

My mother and father took no part in the work for the "Centennial," but they felt the enlarged interest of the period; and for my mother the time had come when she could allow herself to enter upon some public work. She was one of the first members of the New Century Club, which soon became a large and useful woman's club. Indeed, the first preliminary meeting for organization was held in the Clinton Street parlor. She also took part in the first work of the "Harvard Examinations for Women," and she joined a small association of women called the "Moral Education Society," where her long experience in private helpfulness to those in trouble, made her a wise and useful associate.

In the season of 1876–77 my mother printed the memoir of her mother.*

This first edition was privately printed by her brother, Edward H. R. Lyman, who bore all the expense; and it was limited to one hundred copies, which were distributed among the large family circle and a few intimate friends. The

*Recollections of my Mother. By Susan I. Lesley.
1st Edition privately printed, Cambridge, Mass., 1876.
2d Edition, Boston, Press of Geo. H. Ellis, 141 Franklin Street, 1886.
3d Edition, ditto, 1889.
4th Edition, Houghton, Mifflin & Co., 1899.

preparation of this biography had been a great happiness to her. She had accomplished it slowly during two or three busy years, when she could only occasionally find a few weeks in which to work consecutively upon it. She had undertaken it with timidity, at the request of two of her young nieces, and with little confidence in her power to make an interesting volume. She had much satisfaction in the pleasure which her friends experienced from it, and in several excellent notices of the book written by friends who had known and loved her mother; and she felt a continual surprise at its subsequent success in later editions. Among the later reviews of this volume was one by Miss Harriet Waters Preston, published in the *Atlantic Monthly*, which gave my mother especial pleasure.

It was in 1876 that her dear friend, Charles G. Ames, then minister of the Unitarian church in Germantown, began a series of Sunday evening lectures in the northern part of the city, out of which in five years grew the "Spring Garden Society," the second Unitarian church in Philadelphia. A small group of friends had long had the formation of such a church much at heart. Various attempts had been made, in the course of the previous twenty years, to form a liberal society, always ending in failure after a short season of liberal preaching. My mother and father had taken an active interest in these previous efforts, and they now threw their whole hearts into the new movement, which from its first meeting showed a lasting quality, unlike any of those which had gone before. It was a continual delight to my mother to attend these meetings; and, as the years went on, she felt a closer and closer attachment to the new society, as it developed from a hall audience, gathered Sunday evenings, to a sturdy little congregation in its own pleasant church. Not that she gave up entirely the old church, in which she had worshipped for so many years, and for whose pastors, Dr. William Henry Furness and Rev. Joseph May, she had so strong an affection. For a long time she was a member of both societies, but, as the new church in its struggling youth needed her attention more, she gradually came to consider "Spring Garden" as her place. She was for years

a member of the Board of Trustees, and actively engaged in the church work; and she had an intense interest and affection for the society, not only collectively, but for its members personally.

During the early part of their married life in Philadelphia, my mother and father had felt a certain sense of loneliness, and a craving for a return to New England. It was often expressed in their letters, by a few words here and there. They missed the social village life of Milton, with its informal intimacies. They had some warm friends in Philadelphia, but these were scattered over the great distances of the city. My father had his own family, and soon had many personal associations through his work; but my mother had for years no such opportunity to form new friendships, and had to depend largely for society on her own household and on visits from New England friends. Her strength was not great, and the care of her children and household was all that she was equal to in these early years. But with her return to the city in 1868, after the two years abroad, and the moving into the Clinton Street home, her circle of friends began rapidly to widen, and at the period of which I am now writing, she was, as I have said above, associated in various activities with a great number of the finest men and women in the city. With this larger social life and interest in public matters, she came to love Philadelphia as she had never expected to do. And to her love was added a hearty admiration for the good works which, hitherto unknown to her, had been quietly going on around her during the years of her seclusion. Each year brought her more work, and a deeper knowledge of the needs, and also the powers, of the great community in which she lived. She no longer desired to leave it. She still delighted in her annual visits to the East, but her heart was bound up in her work at home; and she returned to it with renewed vigor, and an ever-growing sense of the richness of her life there, and its many opportunities.

The opening of the "Centennial Exposition," May 1, 1876, brought to us many dear friends from the East, and the following ten weeks were full of the delights of their

society. Later in the summer my father, being much worn by months of varied labor, decided to go abroad for a few weeks, and sailed in July, taking both his daughters with him. Soon after landing in Europe, he was joined by his brother Allen and his niece Ellen Stilwell, who remained with him for the rest of the trip.

PHILADELPHIA, *June* 13, 1876. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . Peter is thinking of sailing for Europe next Tuesday by the Vaderland, from here, and of taking both girls with him, to be gone just eight weeks. . . . I am thankful to have him go, for I know he has reached a point of mental fatigue when it is very necessary for him to get entirely away from all this burden of responsibility, from which there is no let-up here. . . .

I shall go to Magnolia, as I expected. . . .

COBLENZ, *July* 19, 1876. PETER LESLEY TO HIS WIFE.

. . . You and I have lived too long and happily together to fear what man can do unto us, and long enough to be well assured that God has nothing but blessings in store for us. The body may groan, but the spirit has ceased to dread. It seems to me as if with us, for us, time and space have ceased to be elements of life. Good and evil are for us henceforth the only realities. And even in the evils of human society we see only a kind of manure, for the self-reproducing soil out of which the flowers and fruit of good of all kinds perpetually spring.

I hear the coming murmur of war in Europe. I see the pan-Slavonic genius rousing himself slowly from uneasy slumbers and gathering his gear about him in a blind way. I see the Germanic and Celtic nations standing a little apart from one another on the watch, anxiously speculating on his motions, and prepared to meet his rush upon them when he gets wide-awake. The old world will rock under the shock of the contest. But it has suffered already many such earthquakes; and it will endure this also; and afterwards there will be again newness and peace, readjustment, organization, association, progress. . . .

Of a visit to Neuchâtel to see Désor he writes:—

. . . The next morning . . . we were all up and at the breakfast table by seven thirty. A large barouche with three strong

Jura horses was at the door at eight, and by quarter of nine we set off up the long road to La Tourne, a chalet or farm-house on the top of the cliff overlooking Rochefort, the ravine, the railroad lines, shore, lake, all Switzerland.

The girls and I jumped in and out of the carriage to walk long distances. The beauty of the scenery by this road is ravishing, although certainly not so surprising as by the Val de Travers.

It sprinkled the last half of the ascent, and was cloudy and cool the first half. Crossing the plain above, with one sharp descent of one hundred feet (around the nose of the little ridge at les Petits Ponts), we reached the Avenue of trees at 12.30 o'clock [M. Désor's farm on the Combe Varin]. Mary and I walked down the Avenue reading the names on the trees. Alas, more have the fatal cross, even those which are newer than our visit in 1867. Lyell's for example.

Désor told us that Lyell came there years ago, after Lady Lyell's death, and wandered round and departed, saying: "I go back now pleased to have seen the Combe, and I shall soon die."

He tells us a series of anecdotes, all of the most interesting character. He is still fresh, and full of spirit, and shows the same tendency to transcendental generalizations, and the same extreme caution and hesitation in adopting positive sentiments.

I must except however his views of cluses, roflas, combes, vallons, etc., about which we had a (?) fight yesterday—Wednesday—evening at Fleurier.

So! . . . We arrived, and had a grand dinner, with *Couscorou* ("The Mama Eva and papa Adam's dish, you know"), the receipt of which he had got in Africa, and taught Marie. It is wheat crushed and steamed a long time with (or over) a chicken, or a lamb and chicken (in a double-bottom kettle), and then flavored. It is delicious.

Besides this we had a course of meats, vegetables, etc., with wines and merriment.

All were radiant with happiness. . . .

Wednesday was a superb day. The bright sun glorified all. After coffee we strolled to Lesquereux's tree, standing alone (Meg drew it) on the edge of the Entonnoire, or sink-hole below the house. . . .

The two following days were spent in intercourse with these friends, during trips by carriage and on foot to neighboring points of interest. The time was enlivened by long

conversations on science, art, and politics; in fact, on every subject of interest. My father enjoyed much seeing the popularity of "*ces deux idoles du peuple démocratique*," Désor and Berthoud, and remarks, "I got a rare glimpse of the 'power behind the throne,' the manufacture of popularity by successful leaders of a democracy of the better order." They were entertained delightfully at the home of Mr. Berthoud in Ferrière, which place was also "the birthplace of Lesquereux." He received from Mr. Berthoud a "little picture of the village and the Chapeau (or mountain) down which Lesquereux fell when a boy," with the gorge of the iron chain, and the vertical rocks opposite.

He had many geological discussions with Désor:—

Our walk then extended from the museum through the town, past Lesquereux' birthplace house, to the gorge, . . . and then to the marvellous vertical walls or dykes of Jura strata, forming the gate of the back valley.

Here Désor and I had a furious controversy over its construction; I maintaining that it was produced by erosion by the little river which rushed through it, he that it was a transverse break not at all eroded. Berthoud stood by laughing at us, Clemens at last coming to my assistance, but professing not to be a geologist. To my amazement, I saw that his common sense seized the geological idea which Désor's old prejudices absolutely forbade *him* to see. Désor is wholly wrong in his interpretations of these fine phenomena. I burn now to spend a summer in the Jura. I feel sure that I can reveal to the Swiss geologists truths of structure quite hidden from their eyes. They have no maps of these mountains worthy of the name. They cannot draw. They cannot describe. They confound geology and topography, while they talk learnedly and write great memoirs on the relations of the two. They are twenty years behind us. They are real Germans,—words stand to them for things. They palter over details and never grasp the *ensemble*. They think from the *flat* and not from the *relief*. They can't see the city for the houses. . . .

Parker's [Theodore Parker] double-head pine is gone. His name and cross now is read on a pine far beyond the avenue, on the south side of the road, just at the turn down the cliffs. In the woods, on a noble pine, you read the title "*Congrès postale* 1874." Désor tells me that he had invited them to his chalet,

after the sessions, one of his friends being their reporter. They all came, and this tree is their memorial. . . .

. . . I rose at 6.30 and wrote. I am writing still. We have had a coffee talk of cluses and vallons, combes and creuxes, synclinal valleys and breaks, anticlinals and retiring outcrops, with maps before us, colored and uncolored. I can make nothing of it. He is puzzled with many local difficulties. His explanations are inconceivable to me. We discussed Süss's new radical hypothesis of Moon bubbles on Earth, the Alps being the northern segment of one such extending to Elba! He agrees with me that such speculations are *not* geology, . . . are worthless and noxious to the young geologists, useless for the old,—false, foolish. The more I see of the geology of the day, the less I respect the so-called leaders and masters of the science. They all seem to me half-bred, boyish, fantastical, wordy, . . . except some of the English. I wish I could have some leisure years before I die. And yet my utterances might seem as delphic and untrustworthy as theirs. No. I must do journey-work still. But I shall found a school of rational workers. That I can do, and am doing; and that must be my monument.

I am now reading J. M. Ziegler's second enlarged edition of his "Verhältniss der Topographie zur Geologie." But in spite of its wealth of sketches, I fear it is not satisfactory. I am amused with this sentence in his preface: —It is so German.

"Der Geist weht wohin er will, aber die Natur weht alle an, nur jene nicht, welche an überfüllten Tischen des Hotels tafeln."

"The spirit blows whither it will, but Nature breathes on all, only not on those who cleave to the overloaded tables of a hotel."

"Wer mit freiem Magen und frischen Auge jene Landschaft bewundert, wird topographisch, geologisch, kurz-naturwissenschaftlich angehaucht.

"Whoever with empty belly and fresh eye wonders at the landscape, he shall be breathed upon topographically, geologically—in short—in the true spirit of natural history science."

These are genuine mottoes. Now I must stop this gossip. . . .

At night, I am driven crazy with conjectures and apprehensions, amounting to convictions that I am a deserter and deserve condign punishment when I get back. What may not occur? What might not be already happening to injure the Survey? I hear nothing—not a word—not a syllable.—My fancies wander in thick darkness, and shapes of disaster appear and disappear as in a nightmare. No general should leave his army during a campaign. . . .

And yet, when I calmly consider everything, I must acknowledge that no journey was ever more successful. No mishaps, no troubles; difficulties vanish as we approach them.

So I will keep heart and cultivate the hope that when I get back in September I shall learn that I was not much wanted before by anybody, and that my forces (which up to the present time have recouped very slowly) will be quite recuperated, and I shall be able to do all my duties for the next year or two, without troubling you or anybody. But alas, my State Printer! What a funk he must be in; and—well, *allons!* . . .

LUZERN, *July* 29, 1876.

. . . I think my last letter was written two days ago at Combe Varin. Well—it was Thursday noon, and Désor and I sat at table discussing, discussing, always discussing,—pencil in hand,—maps beside our plates,—the structure of the Jura. Our old intimacy has absolutely renewed itself. I cut up his bread, he poured out my wine. The great dog lay sick, refusing food and drink, on the hearth behind him. Marie flitted in and out, with nice dishes, and pitied the dog, and talked to the canary in the cage. From the door-windows opening on the rude Swiss balcony, I look across the flat meadows of the Combe at the hills behind Les Ponts, and along the road we had come from La Tourne. The murmur of the mowers, and the movement of the many wains loaded with hay, gave life to the secluded landscape. No one could suspect that we were three thousand feet above the sea; nor that gigantic cliffs plunged a thousand feet down to the cluse of Noiraigue, within a short walk of the door. Colored maps and sections, made by him and Gressly (?), covered the walls, and we would spring from the table to refer to them in our discussions. . . .

Nothing comes amiss to Désor. His soul is wide-awake to all phenomena of still life, and of human interests. . . .

Friday morning, July 28, 1876—I spent lazily at Combe Varin, rising at 5.30—reading until Désor came down to his coffee at eight—after which we discussed European and American geology, and said our last things. He says I must spend a summer with him and see all this part of the Jura. I long to make models of many things in it.

I amused myself with a work on Longevity,—in which Buffon is quoted as saying, when he was seventy, "*la vieillesse, c'est un préjugé*"—and insisting on it that were it not for arith-

metic man would never know when he grew old; the animals never know it.

Dinner at 11.30. . . .

Then down the long road to the Valley, and back along the great route from Travers, past Noiraigue, over the waterway, up under the enormous wall of upturned Jura, round the point of rocks, and down the defile to Rochefort.

What a drive! What marvellous geology! . . . [Sketch of the valley and mountains.] Vast masses of mountain have slid and broken up into the bed, and formed the slopes of the gorge. As far as this passage is concerned, Désor's structure is correct—but the erosion, nevertheless, has been enormous,—he considers it insignificant. . . .

You may imagine what was my comfort, after days of such excitement, to ride alone in a car, hot as it was. . . .

Composing poetry as I went, finishing an ode to the Jura,* which I had begun on Désor's balcony. . . .

PHILADELPHIA, *June* 26, 1876. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . Yesterday, . . . in the afternoon I was surprised with a call from Mr. Emerson [Ralph Waldo], and Miss Ellen, who have been passing three days with the Bradfords, and have gone to-day to Charlottesville, where he is to give an address to the University of Virginia. The dear, beautiful old man, it seemed as if there were nothing of earth left in him, but all of heaven.

* My father's strong interest in the Jura dates from his earliest sight of these mountains in 1844. Mr. Lyman in his biographical notice quotes from my father's "Coal Manual" these words concerning himself:—

"'Fortunate in being the first geologist who had an opportunity to approach the dynamic phenomena of the Jura with an American eye trained on this typical ground, from the Blue Ridge, or South Mountain, to the Alleghany Mountains,' where, from the comparative deficiency of fossils and of coal, and from the repeated and elongated outcrops of a few valuable mineral deposits, the science of geology transforms itself into the science of topography.' The moment he 'beheld the ranges of the Jura with their combes and offsets, their vast escarpments and far-glittering white gaps, he felt at home among friends, where geologists born among them felt that they were strangers. For the valleys of the Jura are filled with later formations full of fossils, which the Appalachian valleys never are. There much is hidden, here all is told. The fossils themselves in the Jura distracted study from the topography. The topography also is gross, massive, simple, destitute of those lessons in detail, those innumerable [small] repetitions of the grander curves, from which we got our first instruction, and to which we retreated from insurmountable difficulties to learn how to return and overcome them.'"

Don't tell *me* his mind is gone,—he remembers everything worth remembering, spoke with understanding enthusiasm of your father's work in the Survey and University, was so delighted he is getting a little recreation, had read every one of the reports I had sent him, etc., etc. . . .

The mechanism through which such a mind exhibits itself may become enfeebled, but the soul within shows brighter and brighter, unto the perfect day. . . .

PHILADELPHIA, *Fourth of July*, 1876. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . My dearest Meggie, I ought to have written to you sooner, but, my dear, I couldn't. Would that I could give you the least idea of the last week, but I cannot. I am now at our dear rooms of the Philosophical Society, looking out on the vast crowd and seeing the enthusiasm, and hearing the Hymn of Peace, and Whittier's Centennial magnificently sung, and the beautiful new bell toll the thirteen original States, and later the seventy-six strokes. The tone of the bell is angelic. Well, my child, think of my piloting James Thayer and his boys, and Josie Revere, under ropes and through crowds, and getting them into this charming place, where we have the very best view of everything, and coolness such as we have not known for ten days. . . .

EAGLE HEAD [Mrs. Towne's place], MANCHESTER, MASS., *July* 28, 1876. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I have risen early, and find that I have more than a half-hour before the family come down to breakfast, and how glad I am to be able to spend it with you, my child! I fear lest my letters have seemed dull and infrequent, but this has not been because I have been having a dull summer. Far from it! But there has seemed to be no end of the letters to be written, no end to the constituents. . . .

I sit down to write. C. says, "It must be time for the mail. I will go and see." She returns and lays down a huge pile.

One from Mrs. P. of Germantown, wants me to procure her rooms at Magnolia, and write her how to get there. One from Mrs. A. wants Miss Charlotte Lyman's address, immediately (I have not got it, and must write to some one else to get it); one from A. J., hoping I can get a room for Miss Mary, who is worn out with heat and work among the poor. One from Miss M.,

telling about the poor little F. children, and confirming my worst fears about the German family, into whose hands poor Mrs. F. fell, when her husband died, and who have been anything but friends. To tell you all that sad history, would fill a volume, and I shall not try. I had before written to Prof. K., but I had no proofs to bring, of what I fully believed, and he had declined to take an interest in making an investigation. But now, with the proofs before me, I must write at once a long letter to Prof. W., a friend of the Fs. who in his blindness is about to get —— appointed guardian to the F. children. And, oh dear, if that happens, good-bye to all hope of getting the two elder children adopted by L—— and G——'s good friend D. I must make my letter to Mr. W. clear and strong for he does not know me, and no more time must be lost. More letters, more constituents. Yes! A letter from Mr. H.'s brother, giving me facts and details of money used, and money wanted for the support of Mrs. H. at the Asylum, and Mr. H. till he dies, which time cannot be far off. And I want that his last days should be quite free from anxiety. There comes a letter from Mrs. Barton, from Aix-les-Bains, France, sending me a cheque for a hundred dollars, for the fitting up of the church vestry. Well! that is all done and paid for. So I write a long letter to Mrs. Barton, who knows the Hs., and tell her that of course I hold that money subject to her order, but would like to turn it over to the Hs., with her leave. She has been out of the country two years, and so I must tell her all about what has befallen them, and why they should be helped. Now when I have answered these letters, it is late, my force is gone, and I drop into bed, with my heart full of my dear ones so far away, and a sad sense of having neglected them dreadfully. They will forgive me, but ought I to forgive myself? . . .

This letter illustrates the activities of my mother's life, even when away from home and resting. She was seldom without "objects." This summer's especial cares were the five orphan children of one of the University professors for whom my father had a tender affection. Chiefly through her efforts during this summer and the autumn, all five were adopted into suitable and congenial homes, where happy lives were insured to them.

The two old people mentioned in the letter had been most useful and active workers in the church and city,

had fallen into decrepitude and distress, and happily it was not difficult to find a number of their old friends who gladly made their last months as cheerful and comfortable as broken health would allow.

PHILADELPHIA, *Dec.* 10, 1876. SUSAN I. LESLEY TO HER HUSBAND.

. . . Yesterday I did not go out, having a slight headache, but sat by my warm fire enjoying the quiet, and reading now and then lovely articles in the *Littell*, or from the London *Quarterly* on "London Poor and Pauperism," and containing an excellent account of the doings of Edward Dennison and Octavia Hill, two of the very *wisest* as well as *kindest* philanthropists I ever heard of. Mr. Ames lectured at the Social Science rooms on Thursday evening on "Wisdom in Charity," a delightful lecture, the room at the Mercantile Library, well filled. He must become a power in this city if he lives. . . .

PITTSBURG, *Dec.* 12, 1876. PETER LESLEY TO HIS WIFE.

. . . I am hurrying home, to present a load of documents to the A. P. S. Friday evening; but I was arrested at Titusville this morning as I was about taking the train North to Corry, and so via Williamsport, by a lot of oil men who kept me in the witness-box, until Mr. Brown took Carll and me to a nice dinner lunch, and then to the noon train South to Pittsburg. And I am again arrested here, by hearing of some levels I can get, and by the need of seeing about the gas well here. I must spend tomorrow evening with Dudley again, at Altoona, and reach Phil'a Thursday evening.

All this is Greek to you. But it is tremendously plain English for me.

I am nearly talked out. They telegraphed to Titusville yesterday, to have a room ready for me to lecture to the oil men; but oil went up yesterday to $4.20, and man and boy went mad. Just like Wall Street. So Brown said: why not talk to the Young Men's Christian Association Meeting. I said certainly, supposing they had twenty or forty lads, as at Tyrone a year or two ago.

Instead of that they had a children's music school, from seven to eight, and the children froze fast to the seats (front seats too), when they heard there was to be a lecture. Men and women flocked from all quarters, and I was introduced by Mr. Scuttle

to three hundred, of every age, sex and condition, as "Mr. Lesley, who would lecture on Geology." Of course I couldn't. It was absurd. Forty five-year-old girls gazed up in the Professor's face to hear a lecture on Geology.

But I talked for an hour; told them stories of the Challenger, and fish teeth in birds' bills; gave them a commentary of the Psalm, "The heavens declare"; told them what rules my father taught me when a boy, to live by; described the Christian geologist as a "barrel of oil"; passed an eulogium on silence and solitude; and in a word held men, women, and children in silent attention the whole hour, and received a vote of thanks at the close.

The sleigh-ride down this morning was pretty,—the talk of three hours afterwards exciting, instructive and good for the Survey. I was dreadfully sleepy and uncomfortable down the river, but enjoyed the scenery in white. Was introduced to the engineer of the road, and found he knew me in 1853–4, and all my friends and acquaintances, from Ned Miller to Bob Jackson. Had been piqued by my "levels" to fix up things at Freeport; talked lots about fossils, etc., etc. For two hours, we kept at it without stopping.

Here I am in this noble hotel, more like the Swiss hotels than any in America, and would stay several days in peace, but for Friday's faculty meeting and A. P. S. Meeting. Hate to go home. Have half a mind to take the train to Pomeroy, and come back through Virginia. No, it won't do.

My whole trip has been a great success. . . .

PHILADELPHIA, *Jan.* 18, 1877. PETER LESLEY TO MISS CATHERINE ROBBINS.

. . . I must stop a moment in my mad career, to wish you a hearty, happy New Year, and many of them, and express my hope that you will come to spend part of it with us. Also to assure you of my undiminished affection, of my perfect health, and entire restoration to youthful activity, for I worked on Monday last until two o'clock in the morning, and always work six, and often eight hours a day, and every day. My organization of the Survey is bearing an incredible harvest, so copious and excellent that I am amazed at it. The animus of the corps is of the finest order, and is as good-humored as it is zealous. The only trouble arises from the press of materials to be put into shape and get published.

But Susan is also reaping a harvest. You never saw a happier "critter." She is in the clouds. All her time is delightfully occupied, and all her plans succeed. No doubt the details are faithfully reported to you by herself, but I know you will be glad to get this testimony from

Your loving friend, P.

PHILADELPHIA, *Jan.* 28, 1877. PETER LESLEY TO MISS ROBBINS.

. . . Susan and the girls have gone to church; they find this winter the happiest of their lives, and I can easily see that at last our many years of endurance in this *city of our exile* have ended in making it a true home. I also am reaping an abundant harvest, after long sowing and ploughing seasons, of which I was too impatient while they lasted. My life-tree, watered with thought, is dropping its ripe burden all over the ground. I thought I should never have opportunity, nor means, nor time, nor strength, to publish my researches; but, on the contrary, fifty people have suddenly rushed up to me and surrounded me, offering with zeal and intelligence all and more than all the aid I require. In fact, I am embarrassed with the abundance of opportunities, and the wealth of means.

I have in press six separate memoirs, some of them are volumes of two hundred or three hundred pages. I commence soon a seventh of four hundred pages, an eighth of three hundred pages, and a ninth of two hundred pages. Before the end of winter, eight more volumes will be in my hands. . . .

PHILADELPHIA, *Feb.* 5, 1877. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . It seems to me I have never in my life had so busy a winter as this, which is partly due to my own improved health and strength, but partly also to a wakening up of new elements in Philadelphia Society that have never been stirred before, which are due to many causes. Every week, different sets of people meet in my parlor to consult and arrange about the formation of all sorts of good things. A Women's Club, for instance, like the Boston one; the *Moral* Education Society; a committee to introduce Higher Education and the Harvard Examinations into our schools, etc., etc. I keep out of holding any offices, for I have neither taste nor talent for being President or corresponding secretary, or anything of that sort. But I find by allowing the meet-

ings in my house, because it is central, and because Peter and the girls are absent all day, I have a chance to influence somewhat the formation of these various societies, to keep out dangerous, or inharmonious, or inefficient elements. So much depends on things being *started* rightly, and so very many good people have small insight into character, that though my help is all "under the rose," I hope it is at least a drop in the ocean. . . .

Then I have been collecting books for a Public Library in Vineland, to help our good Mr. H—— there, who writes me often, and who is full of the Missionary spirit. He says the dearth of good reading in Southern New Jersey is something appalling, and that the library which he started last June is doing a most beneficial work. He told the poor people there, if they would gather six hundred books, he would give them his own library of three hundred books, which he did. . . .

Mr. Ames' Sunday evenings are a very grand success. Last evening, the Hall which holds seven hundred and fifty, was crowded to overflowing, many standing in the aisles, and sixty or seventy going away for lack of room. It was on "Domestic Life," and wonderfully fine. . . .

PHILADELPHIA, *April* 25, 1877. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I lecture to-morrow night to the Working Men, on Cobble Stones. This would imply that they all belonged to the sacred guild of shoemakers, but they don't. All they want is "Natural Science," and all I want to do is to show them that it is as hard as the nether millstone and advise them to have nothing to do with it. . . .

PHILADELPHIA, *May* 24, 1877. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . I went last Friday to Swarthmore, with a young Englishman, Mr. Carpenter of England, to show him the Co-education of the sexes, as he is here to study it,—and we passed an agreeable day. On Saturday, I took Mrs. Gilchrist* out the old York Road to see the Towne sisters, and call at Lucretia Mott's, and we had a delightful day, the old lady at her best and delighted to talk with an English woman on the highest themes. . . .

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* Mrs. Gilchrist was the widow of Alexander Gilchrist, a London *littérateur*, biographer of William Blake. She remained in this country for several years. She was a very agreeable and fine woman.

PHILADELPHIA, *June* 13, 1877. PETER LESLEY TO HIS BROTHER ALLEN.

. . . It is two o'clock, and I have been hard at it since eight-thirty, and am nothing like through with the day's task. And so it is every day. If I allow a day to elapse, the accumulation becomes oppressive. It is like fighting fire in the woods; one can't stop. I turn aside a moment to answer your note of day before yesterday, and thank you for the picture which I well remember, and the original as well. It was a hardish-colored picture, but fair enough to seize the fancy of a youth full of imaginations, and caring more for ideas than the dress in which they were clothed. The past is full of memories, more or less vividly and more or less permanently painted on the brain; many of them casketed in the heart. Let us not cling too tightly to these memories. Let us allow the rose-leaves to drop one by one from between the leaves of the old books. New roses bloom on every bush every year, and will, every year to come. Let us not keep the thorn set fast in our bosom. Let us not regret too much that the powers of enjoyment fail us in advancing years. Let us manufacture new apparatus when the old breaks. Let us all the time be starting on new careers, setting up new tents beside new springs, and take possession of new ground. The past has its encumbrances, and they accumulate and grow onerous, too onerous for man. Old furniture should be broken up. I sometimes find myself buried in rubbish, and lose myself in the heap of my possessions. The *I* [Ego] should keep its liberty sacred. Some one represents the modern man as a pedler, bending under a box of assorted goods. It is too true. Christ had not where to lay his head; but he had no rent to pay, no style to keep up, no appointments to keep, no reputation to watch for, no library to rearrange, no sheets from the printer to read proof of, no bank account to settle, no railway schedule to study,—he walked from city to desert, and from desert to city, as the spirit moved him, a freeman and benefactor, always wise, unanxious, noble, self-sufficient, a denizen of the present, and secure of all the future, because complications and accumulations were impossible. Surely the XIX. Century is not the first; but if man could live free of his age in the first, we can live free of ours if we choose to do so. But we hamper ourselves first with memories, and second with habits. We hate to lose a little of our experience, mixed bitter and sweet, good and bad as it was. We cannot believe in the present, because it seems disloyal to the past, and

we have no hope for the future, because we distrust our native forces of regeneration. But if we chose, we could begin a new life, a strong and happy life, free of the past—at any moment.

I am myself a great slave; but it is partly to great ideas. Not the greatest, but yet great. I mean to make these six years monumental. If I die then, I shall have lived now, and lived no selfish life, but to the pleasure and profit of others, especially the young fellows who surround me and whom I start in their career. The records of our work will be printed in forty volumes, not hid away on bookshelves in musty libraries, but *vade mecums* in every man's hand. It is no light thing to be the virtual owner of $50,000 a year, to expend as you please, without let or hindrance, for the realization of a noble idea. Such is my good luck, and I know that no one enjoys or appreciates it more highly, heartily and unselfishly than you, my dear brother, who understand what my words mean. I wish a thousand times that you were a Pennsylvanian, and had a home here, and were with me in this great work. You would find a new life open before you, full of enjoyment, in the light of which the past would not fade, but mellow into a lovely picture.

I am delighting my evening hours with a wonderful German book by Ebers, called "Uarda," the scene of which is laid at Thebes in the times of Sesostris, 1450 B.C. It is a masterpiece of imagination kept in perfect check by a universal and profound science of his subject in all its details. His "Egyptian Princess" (600 B.C.) has been badly translated into English, but this new book is just out. Mrs. Seiler kindly imported it for me expressly.

I am reading also some interesting memoirs by Maspero of Paris; the first one on "*la chapitre de la boucle Tat*," *d'après les papyrus et les amulettes du Louvre*. . . .

These bits of an infinitely remote human life past, are inexpressibly touching, as they are broken bits of scenery seen through chinks and knot-holes of a barrier, which is no barrier to the imagination and human sympathies, but only to the historical judgment, and sensuous perceptions. The splendid "Hymn to Ra," lately discovered and translated by Grebaut, is ascribed by Ebers to Pentaur, the poet historian of Rameses II. (the Sesostris), and Ebers introduces him and his hymn into his novel, in the loveliest and noblest way. O my dear brother, how I long to live near you to talk with you *daily* of such things, and other things, and many other things, in which we have common interest and a common life. . . .

PHILADELPHIA, *June* 17, 1877. PETER LESLEY TO HIS BROTHER ALLEN.

. . . This is your birthday. I send you my hearty greeting. I don't care for anniversaries myself; they mean nothing to me. But others think a great deal of them, and they mean a great deal to them. I know that you and Joe attach a deep interest to them all. I suppose the sentiment was early eradicated from me, by my archæological studies, the investigation of secular eras, the comparison of immense confluent geological ages, and all that. The consequence has been that *all time* is to me confluent,—one grand unit. Past, present and future seem to me the same. What has been, is still, and will be again, a thousand times repeated. The habit of fixedly regarding the *whole* past, has made past events always present to me, as if occurring now. Nor can I feel that an event of special moment to me, could have *once* happened and then ceased. Such an event continued to happen to me, from the first day on, every day until now, and will continue to happen, or be happening to me, so long as I have existence. Anniversaries, therefore, are to me impossibilities, for what has to-day to do with this day 365 days back, any more than with this day 364 or 366 days ago? Time is not a river regularly slackwatered 365 units of time distance apart. It is a river without a dam from end to end. My heart floats above the stream, and is unconscious of limitations in itself, or in it. It looks upstream, and sees clearly to the fountain-head,—downstream, out into the ocean of the endless future. Let us be masters of time and circumstance, not servants of them. They are good for children, and the uninitiated. But let us cast off such shackles and assert our immortality.

Monday morning. The dinner bell rung yesterday, and after dinner I could not write; so I took the cars to the Zoölogical Garden, and a little monkey made friends with me, and then snatching my spectacles off, ascended to the highest heavens of its cage, put them on its nose, broke them, and scattered the glasses in the straw below. I remained below, blind, helpless and the prey of the jeering multitude. Such is life. I have seen other people dealt with so on a larger scale, and on a more serious stage. But "there is mercy in every place," as Robinson Crusoe sang,—even in a monkey house. The keeper recovered the apparatus, or its *disjecta membra*, and I had another pair in my breast pocket. So I rose triumphant above my fate—as we can do in all other affairs of life. What you did once, you can

do again. What you had once, you can have again. Nature and art are alike inexhaustible.

What a glorious atmosphere refreshes the hot world to-day! Mary is reading to me the life of the Chevalier Bunsen in Rome....

ALGONAC ON THE HUDSON, *June* 29, 1877. SUSAN I. LESLEY TO HER HUSBAND.

... I hope that yesterday was your last University day! What pleasure I have in thinking that it is over, and that now you will have for a time only the Survey! *Only* the Survey; what a great work it looks to *me!* One that will some time rise up and call you blessed, even if you be too weary to note or realize the good you have done.

I had a note from Ellen Emerson the other day, ... she said, "The other day, Father came across a little map that Mr. Lesley had given him years ago, and explained to him, and he showed it to us, and explained it, and seemed greatly delighted to find it again." ...

FORT HILL, NORTHAMPTON, *July* 2, 1877. TO HER HUSBAND.

... Yesterday at the little church, they had a Memorial Service for all the dead; the church filled with votive offerings of exquisite floral devices. Then followed the Communion Service. It nearly killed me. I felt as if I had been dead myself, and come back again. Where were all those pews full of friends, so full of life and zeal, that surrounded me in youth—Huntingtons, Phelpses, Cochrans, Nicholses, Hinckleys, Prentisses, Judge Forbes, the Whitmarshes, and Clapps, my Father's, with many other families? Gone, every one of them. No trace of the old seemed left there.... But the sermon was beautiful, from the text, "Wherefore, seeing we also are compassed about by so great a cloud of witnesses"; and I was glad to be there....

NORTHAMPTON, *July* 6, 1877. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

... I have been reading aloud to Meggie and Annie, the Life of Charles Kingsley, for some hours nearly every day.... I think it very interesting indeed. If only one *could* believe in them, the church organization and forms seem to be a wonderful support, to those whom they do not fetter in the spirit; and he seems to me, in all his letters, as free and liberal in spirit and tone as heart could desire. I especially liked his letters to unbelievers,

and young men suffering from doubts. There is not a particle of assumption or cant about them, but a real desire to guide them into all truth. . . .

PHILADELPHIA, *July* 18, 1877. PETER LESLEY TO HIS WIFE.

. . . *Dr. Draper has in fact discovered oxygen in the sun!* and allows the A. P. S. to have the honor of first publication. Saturday morning all the telegraph wires of the world will announce Oxygen in the Sun.

PHILADELPHIA, *July* 21, 1877. TO HIS WIFE.

. . . Yesterday was a big day; for a lawyer came from Pittsburg to consult me; S. appeared from Harrisburg in a feeze about his report; Lesquereux appeared from Cannelton, with news of wonderful new fossils, and with seventy plates of his Flora finished; William Platt appeared from Blairsville, ill again, but about to return to work; Bien telegraphed about Westmoreland, and will be here to-morrow; all the minutes of Friday were to be written, and I did it; had a consultation with the Sinclairs, about drawing Lesquereux' plates, and then with Ingham; and wound up with two hours' supper-table *chat* with the dear old man and Mary, and one and a half hours with him at Mr. Ingham's house, to whom I had to show and explain the plates, and report all that was going on in the State, and arrange for the meeting of the Board, Thursday, August 2nd, at Harrisburg.

Our Friday meeting was large and enthusiastic, and Prof. Draper explained his great discovery of oxygen in the sun, and perhaps nitrogen.

To-day I mean to rest, although I do not feel the need of rest, nor much disposed to seek it. But next week (this week) I have too much to do to waste my strength. So I shall probably leave my love in the kind care of your own heart, and do nothing more to bring myself to your remembrance, until next Sunday. I do not find *just now* that "the life of a man is tedious." Perhaps I shall, by five o'clock this afternoon.

BRUSH HILL, *July* 22, 1877. SUSAN I. LESLEY TO HER HUSBAND.

. . . Here I sit at the parlor window at dear old Brush Hill, enjoying the sunset sounds, the "Bob Whites" in the pasture above the house, the little birds on the trees of the lawn in front, and the long shadows on the grass. This place will always be very dear to me, and yet I dare say I may live to see it all dis-

mantled and broken up. Would that some descendant were rich enough to take it, and rear such a home; retaining only the best relics of the past, as should hand it down with joy to future generations! But this is impossible.* To me it has a charm no other place can have. It was here we passed the summer weeks together, . . . here our married life began in the deep winter, and the happiness in our own hearts made sickness, small means, and poor prospects of small account to us. We had the best, why ask for more!

. . . I have finished one volume of Miss Martineau, for the days here are long, and I read nearly the whole time. It is intensely interesting, and carries you along like a novel. I could never love her, but her intellect, her industry, simple habits of life, and real simplicity of character are undoubted facts. If she had had a warm heart, or delicacy of sentiment, she could not have recorded so many things about people as she did. But there are whole chapters that are magnificent. Her description of the dawn of Anti-slavery times in Boston is very fine, and every word true.

But, oh! give me Charles Kingsley's sublime faith in life and death, even with every possible drawback of church training, to the wretched materialism in which she landed and was so satisfied. If religion is not a reality, what have we all to live for? . . .

BRUSH HILL, *July* 27, 1877. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Yesterday . . . I read for hours in Miss Martineau's life, which is intensely interesting. Her genius, her industry, and her benevolent use of life, are as certain as that she lived. Tell Father I took up the book with a strong prejudice, and I lay it down, thinking that few persons have ever left behind them an example more stimulating and inspiring. The speculative views she arrived at, would be death to *me*, and I regret them; but they certainly did not prevent her living every hour of every day for the best objects that an immortal soul should. Tell him it would grieve me to have him condemn her until he has read her life, for she seems to me to be an exceptional character. Of course, now and then one demurs from her opinions, and rejects her judgment of things; but I was surprised to find how differently

*This "impossibility" did, however, happen, and the old place, or rather the old house and a portion of the estate, passed into the hands of one of the grand-nephews of Mr. James Robbins.

everything about her impressed me as I read, from what it has in hearing of it from others. Her honesty, her courage, her sincerity, her industry and benevolence, could, I think, hardly be surpassed, and the drawbacks are the small dust in the balance. I shall never cease to think of her as a very noble woman, who has done good service to humanity. . . .

PHILADELPHIA, *July* 26, 1877. PETER LESLEY TO HIS WIFE.

. . . . After taking a cup of tea and a melon, and reading through a hundred telegrams from the seat of war at Chicago and elsewhere,—Mary and I finally settled down to read a most interesting review by Matthew Arnold of George Sand's character, spirit and writings, in which I was astonished to find so much that was true and fine, trained as I was in my childhood by my dear father to hate and fear the very name of their author. She died, you know, just a year ago, in the ripe age of seventy-two at her birthplace Nogant, in Berry, the central province of France, which I traversed in 1844 and Arnold in 1848. Asnières and Bourges are in Berry.

. . . I am nervous about the city noises, I find, and thereby recognize the effect which the riots and strikes are having on everybody. Although the open struggle will be soon over, the subdued dissatisfaction will affect American life for a long time. I thank God for the amazing crop of 1877, for the poor will have cheap bread, for they get low wages.

PHILADELPHIA, *July* 28, 1877. TO HIS WIFE.

. . . Your lovely letter to Mary which she has just had the complaisance to read to me, is worthy of your just and kind heart. For it is wrong to judge any one without full knowledge of them, and even then it is dangerous. Miss Martineau was no doubt all you think her, and I only regret that her manners to others must have had a disagreeable element, to produce so much dislike. I cannot but believe that the truly noble impress surrounding people with affection, as well as respect. But then, I remember the old soap-fat Man who used to come periodically to our kitchen door when I was a little boy; and although he was the personification of all that is disgusting in a human being (not marred by vice) in my eyes, I could see that he was regarded rather in the light of a chosen vessel of the Lord, and a bosom friend of my mother and the family. It was an early lesson for me, although I never felt that I had a plummet in my

hand heavy enough to reach the bottom of so deep a pool of—what shall I call it? Human relationship. For my mother was not only an angel of good manners, but a refined lady in her dress; and the old Soap Fat Man was grease from head to foot, hard-featured, and snuffled his pious congratulations through his nose, with a twang which all New England might despair to imitate. Nevertheless . . . well . . . great is the mystery of Godliness.

I have not yet mentioned our finishing "The Marquis of Lossie" and the great excitement of reading the finale. Phew! I felt as if I had gone through a hand-to-hand encounter myself. It is a noble book, and surely such books possess a great organizing influence over this XIX. Century. Nor is their multiplicity the least of the good signs of the good time coming. Blessings on the head of Macdonald! and blessed be the printing-press that makes such books cheap and plenty! Let us hope that England will never want a Macdonald. . . .

PHILADELPHIA, *July* 29, 1877. TO HIS WIFE.

. . . Can you wonder that ambition dies within me when I read in one number of the Journal of the London Geological Society, published May 1, 1877, the obituaries of six great men in my own science alone, David Forbes, Elkanah Billings, Adolphe Th. Brogniart, Carl Fred. Heim. Credner, Christian Gott. Ehrenberg, and Baron Wolfgang Sartorius Von Waltershausen, who all died last year leaving whole libraries behind them, and reputations and honors not to be rivalled?

Forbes, with whom I dined in 1863, was born nine years after me, in 1828; Billings, one year (1820); Brogniart eighteen years before me (1801); Credner, ten years (1809); Ehrenberg, twenty-four years (1795); and Waltershausen, the same year with Credner (1809).

Who can hope to stand side by side in the history of geology with Ehrenberg and Brogniart, who after incessant labors and world-wide travels during half a century, died, the one seventy-five, the other eighty-one years old, covered with glory?

Do you blame me for retiring from lists in which I cannot expect to win the *first* prize? Is it any comfort to a proud spirit to be called second or third rate?

I could never be content in ambition, were I not the first geologist of my age, or at least equal of the first.

This being impossible, what have I to do with ambition? Much better spend my intelligence to add something to the

reputation of younger, and stronger, and better-grounded men, whose souls are aflame with honorable ambition. The cook who sends up the viands to the guests, can enjoy their enjoyment better than if he sat with them at table. . . .

PHILADELPHIA, *Aug.* 15, 1877. TO HIS WIFE.

. . . I spent an hour with Bien this morning, and the work he is doing for us is simply sublime. . . .

. . . I laughed myself faint in the cars between New Brunswick and Bristol, at Trollope's "Thompson's Hall," the story of the woman who put the mustard plaster on the wrong man's throat. . . . I couldn't help thinking how many reformers imitate Mrs. Brown, and get the mustard poultice on the wrong fellow's breast. They do it of course in the dark, or because they carry so very little a taper of their own. . . .

PHILADELPHIA, *Aug.* 19, 1877. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I see that the great Siberian traveller, Adolf Erman, is dead, seventy-one years old. I got his book when I was a young man. He established Asiatic Magnetic Curves. . . .

[Speaking of a paper by Ernest de Bunsen on the Astronomical Symbolism of the East, he says:] He has lots of other analogies, but it is a most dangerous field for any one to traverse —full of illusions, pitfalls and intellectual enemies. Hence I despair of ever finding that time and patience, that solitude and leisure, that physical and intellectual endurement, which I need to classify, criticise and explain my mass of notes. They will remain after me as a curious monument of wasted years.

At the same time, such intellectual gymnastics are useful to a man in early life, for strengthening his imagination and practising his judgment. . . .

Aug. 27, 1877. PETER LESLEY TO HIS WIFE.

. . . The discovery of Mars' moons, so small and close and quick, distresses me, like a contraction of the forehead or chest. . . .

PHILADELPHIA, *Sept.* 2, 1877. TO HIS WIFE.

. . . Let no profane tongue wag against romance and its wizard Walter Scott, for I will maintain it against Henry Winsor and every other contemner of the art, that it ennobles the imagination,

and strengthens the will, and softens and refines the heart, to read the stories of those who have held their personal honor and that of their ancestral house too high to be sacrificed for any gain. Bloody deeds have brought sudden disaster. But better die young and quick than live long and sordidly. All the native aristocracy of a man's blood boils up fresh and strong, at reading the story of a Knight of Avenel, a George Douglass and a Roland Graeme. It may be my Scotch blood, but it is healthy blood. Let us praise meekness and gentleness, the soft tongue that turneth away anger, and the forgiveness that blesseth injurers; this alone will not save mankind from festering into a heap of commonplace self-seeking. The world needs mettle and strength, scorn of a lie, pride of unstained name, courage to strike for the weak, and to rid the earth of the noxious. Quakerism is lovely, like many, many another weed, when it is in flower; and it is useful, like many a weed for its medicinal qualities; but it was never meant for a universal religion. At all events, the renewal of all noble sentiments with which one rises from the perusal of a story of its opposite in any age, proves clearly to my mind that if Quaker Christianity be good for the multitude, there needs to be a large infusion of heretic romanticism, to keep alive the more stalwart and nobler virtues which Quakerism does its best, like monkery, to eradicate.

How loudly the old heart can still beat at the story of the loves of two young people! *That* poem may be read ten thousand times without palling on the taste. And, after all the interests of life have been attended to and secured, still the boy lover and his mistress usurp the sky like sun and moon above and more beautiful and more celestial objects than the eye can discover in its range around the landscape. Nature is beautiful, and rich of instruction everywhere. But where the feet of two young lovers walk, is a path of light across the dark earth and dark sea of life. . . .

PHILADELPHIA, *Sept.* 8, 1877. TO HIS WIFE.

. . . In another week I must begin my one hundred and twenty lectures at the University. I feel a miser's pleasure in every day and hour that is left to me of the vacation.

In the autumn of 1877 they felt much grief in the removal to Boston of their dear friend, the pastor of the Germantown Unitarian church. Mr. Ames was called to Boston to become

editor of the chief Unitarian organ, the *Christian Register*,—an important post in the denomination, which he filled for three years. My mother felt much personal sorrow, but more for the larger community which he served, not only as a pastor of two churches (that of Germantown, over which he had served five years, and of this new Spring Garden), but movements of public reform. He returned to us a few years later, and established the Spring Garden society to its great strengthening for eight more years, when he was again called to Boston, to follow his old friend, James Freeman Clarke, as pastor of the Church of the Disciples.

The following letter from my father hints at what my mother was suffering in the removal of this friend to a new sphere of usefulness. She was at Springfield at a meeting of the Ministers' Institute.

Oct. 13, 1877. PETER LESLEY TO HIS WIFE.

. . . The pleasure of writing to you almost compensates for the loneliness of your absence; and would quite, if I had bright things to write of, interesting stories to tell, noble adventures to relate, divine prophecies to utter; or if the inferior revelations of science interested you. Sitting, as you do just now, in a throng of excited enthusiasts, listening to one after another of the great Inspirers of enthusiasm, refreshing your disappointed spirit with convictions that the battle is not lost because one wing of the army happens to suffer a check, I refrain from the vain attempt to offer you any lower or lesser pleasure. You will come back to us, feeling that the truth of the Lord is like the oxygen of the earth, an inexhaustible resource for all times and all regions. It may be locked up in flint and clay and iron ore and granite, while it is freely flowing as air and water through the rocks, and through the woods, and through the sky, giving life and breath and joy to animated crowds of every form and character, senseless worms, ephemeral insects, and even venomous and rapacious beasts, as well as beautiful birds, useful kine, and men and women, little lower than the angels, because they work and love and pray.

You will return to this Babylon with its million of such men, women and children, with your heart purged of its chagrin, and your eyes lightened of their sadness; because you will know that your hope is only deferred; that the Spirit of God always moves

on the face of the waters, and is ubiquitous in its daily business of working miracles in human hearts and lives. The still small voice whispers in all houses, whether there be a prophet in town or not. There have been many ages during which God has multiplied himself into a whole sisterhood of charity, because the plague of violence, fraud and debauchery raged continuously and everywhere. Books also now have taken to the pulpit, and preachers are more numerous than leaves. We live in a good time. The millennium commenced with the beginning of the century. It is already advanced. Wisdom will not die with us. There will be corn in the soil for all mouths. You may easily convince yourself that the whole spirit of Christendom is experiencing a slow change of heart,—the slower the surer. Organic changes require time and concurrence; both in the brain and body, and in the body politic. What a sight it was to see that strong, gentle, noble face yesterday, and think—it is the face of the Governor of Pennsylvania! A good and great man rules. The Lord's anointed. And yet superficial people croak of the degeneracy of the times! And yet this great State has had to wait nearly a hundred years for such a ruler; and when the people got him, they chose him for their ruler a *second time!* . . .

Oct. 14, 1877. To his Wife.

. . . I bent over my map all this morning, thinking now of you, and now of those ages on ages during which the mountains which I was coloring in were being deposited and the valleys being eroded. It was an eloquent sermon, and with wonderful contrasts. You so young—they so old. You beautiful in youth, the last flower of the ages—they hoary with time and forests and sorrows of destruction. You immortal, and they destined to perish. Yet the same divine wisdom, power and love, manifest in both. As I mused, the fire burned. As I laid in the colors, and brought them by a thousand patient touches to harmony, so by a thousand patient touches of the Divine hand we are gradually fashioned into what we shall be. What a lesson of patience, of gratitude, of faith—not in the sense in which religious people use the term, meaning by it assurance that they shall get what they desire,—but in the eternal meaning of the word, in Christ's meaning of it—assurance that what He doeth in us and for us and with us shall and must be right! If we could retain our hold of *this* faith equally, all days, and all years, great would be our salvation truly. . . .

PHILADELPHIA, *Oct.* 18, 1877. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

[After her return from the ministers' meeting in Springfield, Mass.:] Here I am once more after my ten days of excitement. . . . The meetings at Springfield were intensely interesting, and the gathering most harmonious and full of good feeling. I especially enjoyed Wm. Henry Channing, who is always so warm and spiritual. I had the great pleasure of taking tea with him at Mary Anne Cochran's, where also Mr. Silsbee was staying, and the conversation was delightful. At Carrie Briggs's the society was charming. Our own Rufus Ellis, and Mr. Samuel May of Leicester, and a Mr. Burr, Mrs. Ames and myself, and Mr. Ames from Thursday till Saturday. There was great discussion of the essays read, and much jollity, as well as serious talk. Mr. Calthrop of Syracuse dined with us every day. He is a very interesting talker, and his Essay on The Messiah and his relation to the Old Testament History was masterly, full of erudition, and as dramatic as possible. I had a constant headache all the week, went to all the morning meetings, but not in the afternoon or to the evening reception. I had enough to refresh and occupy my thoughts, and saw many persons in a very pleasant way. Among these Edward Hale and John Ware, who were especially cordial, and very sympathetic about Mr. Ames's leaving here. Mr. Channing expressed great delight in Mother's Life, and wants to borrow a copy for a few months to pass round among his friends in England. . . .

PHILADELPHIA, *Nov.* 18, 1877. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . My days are very full now, and strength not great, although I am much better than when I first got home. I tried very hard to keep out of things that occupied me last winter, and I am still trying, but it is never so easy, after putting one's hand to the plough to turn back, as it might seem. The Woman's Club, and Harvard Examinations for Women, and the Spring Garden Services, all came to me last year, with special reasons for serving each one, to the best of my abilities. I would gladly have kept out of them all this year, but it was not possible. Well, our private work is the best we can ever do in this world, but these organizations sometimes add to our means and tools, and ought not to be despised, if they enlarge human sympathies. . . .

PHILADELPHIA, *Nov.* 20, 1877. PETER LESLEY TO MISS CATHERINE ROBBINS.

. . . What a strange sheet of paper this is to write a love letter on! But I have no other kind. That is, barring some legal cap paper with staring red line down the left side, like the red stripe down the trousers of a British Soldier,—or foolscap, tall and coarse and dull as a sand-bar at low water; and on that I fear my Kakography would look like the tracks worms and crabs leave on such a bank, and that would never help to raise either your spirits or mine. Not that mine are low. Far from it. Only low in the sense of Mark Tapley's when poor Pinch took him up into the chaise for a ride to Salisbury and Mark confided to him that he meant to run away from Mrs. Lupin and the Green Dragon, because it was so jolly there, so many skittles and choruses and what not, that he had no chance of coming out strong so long as he stayed there.

The fact is my dear Aunt Kitty if you were in Susan's Green Dragon you would find just the same kind of fault with it; it is so full of firelight, and lamplight, and sunlight, and girls' songs and laughter, and lovely jests, and young folks coming and going, and pretty faces, and kisses, and tender chickens for dinner, and Milwaukee beer, and new discussions of the doctrine of evolution, and photographs of foreign cathedrals, and bright letters from all sorts of good people in distant places, and Meg's memory sketches, and ministers, and Unitarianism and women's clubs and church receptions and proofs of Bien's colored geological county maps, and indexes of books (reports of progress—of course), all in manuscript, and returned aneroids, now that the field season is over, and rings at the front door by tramps, and I cannot detail half the agreeable and exciting items of its precinct —that you would agree with Mark that it was no sort of house to be jolly in.

And yet, I long to have you here to help along with the lovely hurly-burly. You may be sure our arms would all be wide open to receive you, and you should be "clad in silk attire," and live like a pet Maltese cat curled upon the hearth rug. The girls would make gold and silver of you and Susan would pour into your sympathetic ear all her heart-breaking troubles. You would be so happy!

Why is the world so round and big? How much more encouraging to all the Christian Virtues it would be, to live on a smaller-sized orb like the moon, or one of the asteroids, Juno,

Ceres, Pallas or Vesta, any one of them, or all of them, just as you like. Then we could take a morning walk all round it, if the day was fine, and take supper at one of the poles. We could see every dear friend we had on earth at least once a week.

Now and here, great continents, and greater oceans, separate loving hearts and lives. Nobody seems to live less than about three hundred miles off; and the cars in winter have red-hot stoves in them, which is both unwholesome and dangerous. As for steamboats, public confidence in them is abandoned. . . .

As for me, I would fain go live in your neighborhood for a month, not only to see you, but to get a long breath once more. The Bible says the race is not to the swift, nor the battle to the strong, therefore, as I am neither swift nor strong, I have been vouchsafed both the race and the battle, and they last as long as a French play.

Considering that I got out of conceit of big libraries years ago, it seems rather ludicrous to turn me into the manufacturer of fifty volumes before I die. Yet it looks like a fixed fact. I am bound to get five or six more of them out of press before midwinter. Fortunately, I am sure people will read and value them, for they tell people all about their own concerns, and that everybody likes.

Among the ugly crowd one beauty walks. It is our dear old Lesquereux's masterpiece, the Fossil Flora of America, illuminated by seventy or eighty plates of all sorts of ferns, and leaves, and tree bark of the Coal Era. You shall have one when it is printed.

In December, 1877, my mother and father went to New England on a short visit, one of the very few occasions when they were able to go anywhere together.

BOSTON [*Christian Register* Office], *Jan.* 2, 1878. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I was driven like the wind to Sarah Forbes' cozy little parlor, where she had waiting for me a lot of geological specimens from Fayal, and a larger lot of imperative questions about the universe. Soon, enter John M. Forbes, the grandchildren, Mary the lovely, James M. Robbins—servant announcing dinner, —the silver question and capacity of our mint—sherry, old madeira and hock, duck, etc. At five we were sent to town,

and your mother went to Aunt Revere's—I to the Parker House (to the *Examiner's* Club?) The next three hours with J. F. Clarke, Tiffany, Whipple, T. S. Hunt, Dr. Hedge, C. Everett, Parkman, and a table full of nice people. . . .

PHILADELPHIA, *Feb.* 21, 1878. PETER LESLEY TO HIS BROTHER ALLEN.

. . . *Enchanté à recevoir*, etc. But in sober English, you cannot imagine what a delight it was to get anything from your hands, and to know where you were, so that I could write, as I have long desired to do, if I only had some decent insurance on the letter. Of course it adds 100% to the value of the information, to learn that you can hop. Perhaps you will hop with impatience at my garrulity before you get through this letter. I don't mean to spare you. I don't mean to be mean as to ink. I scorn low economies of paper and stamps. I have a thousand yards of thoughts spinning from my mind, like ribbons from a mountebank's mouth. Nobody to talk to. Not a soul in the world but you. Wives and children are nice, but they are not *men*. They are too dependent. They look *up*, not *down* on you. They are parasitic, not fundamental. All my manly friends are dead, with whom I could discuss with reverence towards them the problems of life. Others as worshipful, are strangers to me, or I to them. God conceals himself. Isaiah, Nehemiah, Jesus, son of Sirach, Socrates, Jesus, son of Joseph, Confucius, Sakyamuni, Ambrose, Savonarola, Fénelon, Spinoza, Dr. Arnold, to whom men went and clustered round for suggestions, corrections, comfort and re-enforcement, are now mere names, and their writings are answers to questions which I no longer wish to put—other questions daily arise, which they could not answer were they living and accessible. There are living men who can, but where are they? "Money cannot be better spent than in seeking for and finding a wise man," said Socrates. But money will not always find what it seeks, and he who has to earn his family bread has no money to explore the world with for guides and masters. So I work on, fight on, alone. You are my oldest, nearest and dearest friend, and I often long for daily intercourse with you, which if continued daily for months, would so rub and polish our sides together that a perfect understanding on all subjects, and mutual help and strength and comfort, would be established. But you are a movable, and I a fixture, and we scarcely see each other, and never communicate. For you are

lazy in letter-writing, and I grudge every minute which I take from business to enjoy myself thus.

I often repeat in memory the pleasant days we spent together in 1876. What a delightful time that was! How we enjoyed seeing the same fine things along the Rhine, and over the Alps, and through France. Can't we do it again? I feel pretty sure —no, cock-sure—that the oftener we did it, the better it would go. I have champed the bit to think of you in Florida this winter, when under other circumstances I might have enjoyed all that you enjoy, and increased your enjoyment by sympathy and participation.

But even when you are at home I can't get at you, I am so enslaved in the city. Every day has its compulsions. Duty is pleasant, but too many duties are like too many children, distracting, absorbing, intellectually demoralizing. The son of Sirach said never a finer thing than that.

To-day, I took a longer walk than since I footed it with Mary over the Brünig pass in 1874, and feel foot-sore enough. But I had a gay companion in Percy Frazer, who is full of the Mining Engineer Institute Meeting, this week—and a lot of other things. He seduced me through the park to the Memorial Building, which I was surprised to find filled with beautiful faïence, mosaic, and other curiosities. I really think it will prove to be in time a sort of Musée National. The dearness of hand and head labor, and the impecuniosity of institutions, the false economy of republican governments, and the indifference of private wealth to public spirit, are all manifested there, as in so many other places. I never wish for wealth when I am in my own house, but I never fail to long to be wealthy when I am in a place free to the public. It is so noble a vocation to serve the commonwealth; to distribute delight and instruction to the multitude. One can live happily in a bare hovel, but one could be a prince so easily with a few hundred thousands judiciously expended on a museum. All history proves that no investment of wealth pays such tremendous dividends to the investor. All I ask now is to spend and be spent for the good of my kind.

PHILADELPHIA, *Feb.* 11, 1878. PETER LESLEY TO HIS DAUGHTER MARGARET [then in Boston, studying art].

. . . I am delighted that you find it so easy to make arrangements which please and suit you. Nearly forty years ago I was writing from Boston home, such letters to a father who loved me

as entirely as I love you. With this difference, that he knew nothing of Boston but as a place of dangerous *isms*, and nothing of the people who lived there, but as Emersonians, Parkerites, Garrisonites, *et id omne genus;* whereas I have lived and loved there, and believe both place and people to be as nearly perfect as the age and the earth permit.

In March my father gave a course of six lectures before the Woman's Club of Philadelphia, "The Century Club."

CHAPTER XXVIII

Sixth Trip to Europe

Early in July, 1878, my father set sail for Europe. After two years more of constant and uninterrupted labor on the survey, he needed this rest and change of scene. He took with him his oldest daughter and her cousin, Miss Fanny Brewer. After passing a few weeks in Belgium, Southern Germany, the Tyrol, and Switzerland, he went to Paris, to attend the meetings of the Geological Congress at the Paris Exposition of 1878, of which he had been appointed one of the American Commissioners.

[Shipboard], *July* 11, 1878. To his Wife

. . . My mind seems refreshed enough to begin again to think a little; just enough to make me feel as I remember on the breaking of a fever, when the delicious coolness returns to the skin, and a sort of silence pervades the house we call our body. When it is a delight to know that friends are moving about the room, asking no questions, and calling for no duties; all responsibility sent away for a time, and the native liberty of one's existence sits beside the bed, and watches one against the factitious and petty tyrannies of custom. . . .

I feel twenty years younger at least, and stand aghast at the recollection of the old age I left behind me in Clinton Street. . . .

Antwerp, *July* 28, 1878. Peter Lesley to his daughter Margaret.

. . . A nice thing has been said by General Grant, my dear Margaret, and its effect on the French nation shows how powerful the individual is in the xix., as in the xiv. and xv. centuries, and how a word is, after all, the power in the world. "Did you see the Prince Imperial when you were in Copenhagen?" asked a Norwegian reporter of General Grant. "No," he replied, "I don't like his family. I greatly admire Napoleon i. He

was a great genius. But Napoleon III. betrayed the confidence of the French nation who elected him President of their republic, when he made himself Emperor; and again by his useless and costly wars, by which he dishonored and distressed the nation. Therefore I had no desire to visit his son and heir." These words have excited the liveliest pleasure at Paris, and elsewhere in France.

The result of the Berlin Conference is very satisfactory; and I must confess that I feel a sincere respect for D'Israeli, Salisbury, and their colleagues, who readily and in a dignified manner slowly forced affairs to flow in a channel which is safe for Europe's and the world's peace and prosperity. The politics of to-day differ from the politics of past ages in all essential features. Formerly, the false and foolish born "rights" of families, dynasties and individuals, were the sole objects held in view. Now, we see and hear of only the "duties" of rulers, and the rights of nations. At last, the function of government has become recognized: viz., to protect, foster and confirm, the well-being of whole populations; and that, not as against each other, but as in harmony with all. Christendom is an acknowledged whole. Even Mohammedan lands are now inserted in the list of countries to be subjected to the benign jurisdiction of Christian politics, and to share in the blessings of international justice. The predominance of peaceful methods gains vogue and acceptance every year. . . .

MASTRICHT, *July* 30, 1878. TO HIS WIFE.

. . . The grottos of Petersburg, or Petershof, the quarry mines of Mastricht—how can mortal pen describe their grandeur and attractions for the tourist of excitement, the tourist of art, or the tourist of geology! I have longed to see them for thirty years, and find them to exceed my highest anticipations.

They remind me most of the old entrance workings of the Baltimore Company's mine, back of Wilksbarre. Such colossal piers, such roofs, such vistas in all directions, such black darkness, such sunlight effects for a little way in, such flambeaux effects before the eye is accustomed to the glare, and then,—then, when all is right in the organ that is to drink in the scenery, such vast cathedral naves, aisles, transepts, square piers, like those in St. Peter's in Rome,—vertical walls, seventy feet high, flat ceilings, level floors, vanishing vistas!

The stone is a crumbling calcareous sand, of a drab, or olive-white color. Here and there, it is blackened by the smoke,

where tne guides every minute or two dash their flambeaux against the piers. Here and there long horizontial black bands mark the slumbering fossil trees; or vertical black streaks indicate vegetation, standing where it grew. Black knots which ring to the hammer, are tertiary sponges turned to flint. In a long series of cross-cuts, the walls had a plinth or stylobate of three to four feet, left untouched by the workmen in the rooms, because that layer of rock is too thickly studded with flints to be marketable for building purposes. . . . We stopped before a room: "there the crocodile was found," said my guide, "which is in Paris now." He stooped and picked up a small cylinder of rock—"that is a bone," he said. "I have a collection of mussels, oysters, etc., that I have found; if you will come to my house you can see them; buy some if you like." I put the bone in my pocket, thinking how hard my journey across the Alps would prove, if I accepted every fossil the guides would offer me on my journey thither. Before I reached my hotel, it had crumbled, in my pocket, half to powder.

We stopped again. "See this root of a tree, on the floor." I stooped and drank from a large cuplike hollow in its top, made by the constant dropping into it, from the ceiling, of single drops of water. I looked up, and saw the rest of the tree projecting downwards from the roof. The bole of the tree had been cut away by the quarrymen. The cup-shaped root was about two feet across from brim to brim.

Turning a corner, the guide thrust his flambeau under a projection, and asked me to listen to the roar of the ascending air.

"How much rock roof have you, above the galleries?"

"Two hundred feet."

"How deep beneath the floors can you find this kind of rock?"—"Three hundred feet."

"How extensive are the works?" [I asked.]

"Ah, *mon dieu*, there are 108,000 miles of street in the hill." "How is that possible in one quarry?" "There are a thousand connected quarries, all the way from Mastricht to Liège, for thirty miles along the Meuse." . . .

"Are not some of them natural grottos?"

"Yes, but most of them are artificial. The Romans began them, and they have been worked by Germans, Spaniards, French, everybody, down to the present day. See here!" and he took me through a furlong of aisles, every square foot of which for ten or twelve feet from the floor bore the name of some visitor;

they were in all languages; many of them in patois; some in a tongue not understood; most of them perfectly legible.

"See," said he—waving his flambeau carefully around it, lest a particle of soot should soil it—"See—Napoleon!"

Yes, there in red Kiel was the bold familiar cursive signature of the first Napoleon. But half obliterated. Two Prussian officers dashed at it with their sabres, and it was only saved by the guides when half the mischief was done. . . .

A little further at the corner of a pier, in a crowd of names was the rude sketch of a bishop.—"Here," said my guide, "three priests were found dead of hunger. They had entered without a guide, trusting to a ball of yarn. The thread was cut by a flint, and they could not find their way out again."

The rectilinear mode of mining the soft rock shows itself everywhere. It is quite *à la mode Japonnoise*. All the walls are scored by the marks of the pick. Curfs or channels, three inches wide, and one to three deep, pass from ceiling to floor at intervals of two to three feet apart, showing that the blocks have been squared here, and carried out ready for market. The dead horizontality of the formation keeps all the gangways and breasts on nearly a level, although irregularities of constituency, that is, a want of perfect homogeneousness in the formation, has caused certain variations in the run of the floor.

At last we regained the *Bratiss* near the entrance, which he locked again, and then thrust his flambeau into a hole to conceal its glare. I saw the sky, and turning gazed with delight upon a broad patch of real moonlight, with which the tempered sunshine covered one side of the pier. In a few minutes, we were issuing from the outer gateway and descending the carriage road to the foot of the hill and the level of the canal.

Such was my day at Mastricht. A memorable day. How strange that I have never met a person who had been there! Yet I myself was thirty years in getting to it—and on my sixth journey to Europe. How many other such places I have not yet seen, who knows? In fact Europe is like the Tertiary sandstone of Mastricht, a vast bed of fossil life. Wherever you penetrate it, you find new, strange, beautiful old things, infinitely varied in character, as in age and relationship to the past and to the present life of mankind.

Yet crowds flock to Ems, to Hamburg, to Spa, to Monaco, where they can catch glimpses of crown prince and suite, as if words and names were things! to flirt, to gamble, to gossip, to yawn, to dress, to dine, and get to hell as fast as the slow pace

of time permit! *Ja, ja, Herr Jesu, sind nicht alle Thoren noch todt.* . . .

ZURICH, *August* 20, 1878.

. . . We visited the museum, with its immense collection of palafitte relics . . . .

I went in to see old Ferdinand Keller, now seventy-eight years old, and he showed me, under glass, the photographs of his friends, most of them now dead. "They all do it," he said; "but fortunately one after another." He is a small spruce old gentleman, typical Swiss, neither French nor German. I wonder what the race really is. . . .

LUCERNE, *Aug.* 21, 1878. PETER LESLEY TO SUSAN T. HILLARD.

. . . I write to you, from what I must think from repeated visits to it, the most beautiful place in Christendom. I wish I could send you the scarf which the Queen of the Fairies bestowed on Bartolomaeus, the Barometer maker of Vienna, that you might by a wish transport yourself to the room in which I write these most lame and inadequate expressions of my constant faithful love to you, unabated by time and change; always the same, in sunshine and shade, summer and winter, youth and old age, in best and worst estate of body and of mind.

I write with my window open; the setting sun on the mountains; the cloud shadows flying over the lake; *Mons* Pilatus, glorious cone, towering opposite, half hidden by the ancient watch-tower in the middle of the outflowing river. The quaint old wooden bridge joins the tower to the *quai*. The great, white, new stone bridge spans the stream, and leads to the railway station. The middle ages are married to the XIX. Century, in the presence of mountains of all ages, from the tertiary to the oldest known.

Carriages full of tourists pass and repass beneath my window. Steamboats take away and bring crowds of pleasure-seekers, weary workers, sick people, lovers, newly married pairs, students with knapsack and alpenstock, burgomasters with their portly wives and daughters, doctors, poets, priests—from and to the wharf in front of the hotel. Little boats skim the surface of the water. In the far south, beyond the head of the lower lake, rise the snow peaks of the central Alps. Clouds just touch the calm of the Rigi, but leave its vast precipices bright and clear.

The two girls have no doubt had a lovely day of it and a brave ascent. I expect to see the steamer on which they return round the distant point to the left, every moment. Supper waits for them. What does not wait on youth, virtue and beauty combined? All that you and I have left behind us and bid farewell to,—except the deep, and ever-deepening, love of the heart. That is ours, as well as theirs—yet. More ours than theirs, for we have had it long, and proved it. This of us never dies, whatever else may fall into decrepitude. Of this we never weary, when the grasshopper becomes a burden. With this we are surrounded on all sides, as with the atmosphere, and its divine oxygen is our breath of life. Surely it is God himself, everywhere present, invisible and friendly. How do we know that the air is not conscious and benevolent? How much more likely that that spiritual atmosphere is divinely conscious of all it does for all hearts? If so, we have an infinite reservoir of affection about us, on which to draw, and in which we may see the quintessence of faithful friendship forever. . . .

The Gletscher Garten here is a wonderful place. They have accidentally uncovered a group of pot-holes, made by the waterfalls of an ancient glacier, which descended thus low into Switzerland. The round stones which wore the pot-holes remain at the bottom, and the whole process is evident. All the surfaces around and between the holes are full of fossils, and scratched and polished by the ice.

There are models of the Alps here of great size—as large as a room floor—made 150 years ago! very bold and truthful, although exaggerated in the scale of height. . . .

PARIS, *Aug.* 29, 1878. PETER LESLEY TO HIS WIFE.

. . . Thursday, 29th, I went to the Geological Society rooms, and paid my *Cotisation* of twelve fr., and subscribed for a banquet of twenty fr., got my credentials and went for [Prof. James T.] Hall, . . . left a letter for him; saw the beautiful statues and paintings in the Luxembourg Gallery (very hot), took lunch at a restaurant opposite, failed again to see Hall; drove to the Trocadéro; found the Congress * assembling in the great hall upstairs at the top of the staircase, at the centre (after walking through an immense gallery filled with admirable collections of art, historically arranged), and was cordially greeted by Hall, Hunt, Chamberlain of Wisconsin, Cook of New Jersey, Watson,

* Geological Congress of the Exposition Universelle, 1878.

Hébert, Délesse, Daubrée, Capellini of Italy, Barrois of Liège; and was afterwards introduced to Von Möller of St. Petersburg, Cabot of Prague, Villa Nova of Spain, Favre of Geneva, and others.

We sat four hours, hearing papers read. Five ladies were present. The hall was full. Hébert presided. All went on in French. The speakers were rapid, energetic, inarticulate, often speaking with their backs to the large audience, and gesticulated like monkeys.

Friday, August 30th. I was present at nine o'clock at the council meeting in the hall of the Geological Society, 7 rue des Grands Augustins, near the Pont Neuf. Hunt joined me on the *quai*. It was an amusing and wearisome three hours' work to arrange the programmes. Hall was asked to preside at the P.M. session. He refused. Then they asked me to preside. I refused. Then Hunt was made president for two hours, and somebody else from four to six. Hébert presided at the council, Jannetar was secretary. . . . Everybody talked all at once. Three sometimes spoke vehemently without listening to each other. Total absence of parliamentary rules. Hébert was very absolute, and funny, and good-natured, and sometimes gave way to suggestions. Finally the order of speakers was arranged for Friday P.M., and then an other for Saturday P.M. I was placed third on the list, with my paper of Fontaine and White's discovery of the Permian in Pennsylvania. All the Friday papers were on nomenclature and coloration of maps, etc. All the Saturday papers were on limitations of formations, and in beautiful order. Hunt commencing with Cambrian, Von Möller with Carboniferous, I with Permian, Velain with Trias, and Cope with Cretaceous and Tertiary (for Saturday).

After council, Hall and Barrois went away to get up Hall's speech on the Palæozoic order. Hunt and I went to the Luxembourg, and lunched at a restaurant opposite. . . .

Hall opened the *séance* with an English speech. Nobody could understand it. I was called to take a seat alongside of Capellini on the platform. He is a delightful fellow, and justifies Le Conte's account of him. Barrois of Liège then gave a running French translation of Hall's speech, not very exact. I resolved then to speak in French myself, and could have done it then, but the next morning I sat down and wrote out six or eight pages and read it, interlarding my remarks with others extempore. But of this anon.

Several others followed Hall, and the speaking was much

better than the day before. Favre spoke well. At four o'clock discussion commenced, and a good many got the floor and supported or attacked Hall's position; taking sides for or against Hunt's. I understood a good part of what was said, but lost all the delicate distinctions of argument and opinion. It was unsatisfactory. I saw also that there was such a discordance of attitude and experience, that the Congress will be a failure.

There are no German geologists here and no English geologists. This fact is ruinous to the success of the Congress. Hall and I agreed that all the work must be done by committees during the next two or three years, for a Congress to meet in 1880, or 1881, in Italy. Hébert is evidently incredulous of any result. Everything confirms my old convictions that *unification* is an impossibility. I shall write a paper on it for the American Philosophical Society.

Still it is a fine thing to come face to face with all these men. There are three hundred, more or less, present. I shall bring you the list back with me.

Blake is here, Cope, Selwyn, and that is all I see yet, not above mentioned. Young Dall is also staying at the Continental. . . .

Aug. 31. Our afternoon Saturday session was an interesting one. Hunt spoke on his Cambrian hobby and was followed by Lapparent, Faber, Barrande, and several others, vehemently supporting Murchison against Sedgwick.

Then Von Möller read his classification of the Coal Measures of Russia and elsewhere, and there was a good deal of discussion about that.

Then I read my paper on the Permian of S.W. Pennsylvania, and was complimented by a great silence of the audience, by handshaking on the platform, by a little speech of the president Hébert, who said I had done another great service to the congress, in showing that while the lithology remains the same, the palæontology may change completely.

It was all very pretty and cordial.

I was very tired, and left the hall immediately with Mary. Hébert came up to me to get an introduction to Mary, and has been very kind.

Hall and Cook and I are anxious about the committee on nomenclature. But we can do nothing until we have more talk with the authorities here.

AMIENS, *Sept.* 9, 1878.

. . . Meanwhile I go to Lille to-morrow, where I expect to meet Hall, Hunt, and Barrois, see the collections of Eozoic rocks, and go on to Antwerp.

My Friday last morning talk with Hébert and Selwyn was a most important one. Mr. Hall had put up the specimens in my boxes beautifully, and Hébert was charmed to get them. They will help in settling some of our most difficult problems. . . .

I sit in the centre of the romance of the Middle Ages in the north of France. If I ascended the cathedral towers, I could probably see the distant eastern highlands of the forest of Ardennes; and to the north, the hills and plains of Brabant and Flanders. To the south, lies the low divide between the Somme, and Oise, and Seine, crowded with places of historic name and fame. Every village had its count, duke, bishop or archbishop, whose title is a story, a whole history in itself. Normandy on the west; Champagne on the south; the saucy cities of the Meuse to the east. Four hours by rail would take me either to Calais, Brussels, Paris or Rouen. It is no further to Rheims, the city of Kings. It is no further to Sedan, the burial-place of despotism.

The valley over which I look is full of the bones of extinct animals. Thirty miles down its banks, was made (at Abbeville) the first grand collection of the relics of prehistoric men. What movements of savage tribes have surged across the Somme above and below Amiens, into Gaul!

It is a great poem. The first Cantos were written ten thousand years ago. The end has not yet been thought out.

I wish I had strength to write for the *Christian Register* a series of letters about the events of the day; the struggles of parties; not like ours, fighting only for the spoils of office; but parties infuriated with opposite ideas. Yesterday the Count de Demaine, a nobleman of old Roman blood, and the Mayor of Avignon, collected a body-guard of four notorious ruffians, and entered a printing-office, and half killed a well-known writer, because of two political poems which he had published. But this was probably only a pretext. The real purpose of the assault was to strike terror to another author, whose forthcoming political pamphlet the royalists dread, and have not yet been able to prevent either by entreaties or by bribes. The old order of things is slowly but steadily giving place to the new, and the privileged classes are desperate about it.

Meanwhile the Italian priesthood is preparing to follow the

Austrian troops into Bosnia, and take possession of a small new world. The Moslems are gradually crowded south, into and through Albania, into and through Macedonia, into and no doubt eventually through southern Bulgaria or Roumelia, until they will all be concentrated in Anatolia. It is a gigantic exodus, taking effect under our eyes, in our own time. But it will be completed only when Austria has stopped fighting, and constructs her new, long-waited for, railway lines across to Salonica. Then the wealth, energy and intelligence of Germany will pour down to the shores of the Ægean, and the times of Pericles and Constantine will come again.

While the politician, the philanthropist, and the man of the church, each stands aghast at these movements, not knowing what is to be the result, the philosopher admires it all as part of the planetary life. . . .

LILLE, *Sept.* 10, 1878.

. . . I walked out the Rue Royale, to the Université Catholique, and had to retrace my steps and cross the city to the Université de l'État, where Gosselet and Barrois are members of a faculty of science, with six others. The faculty of medicine, thirty in all, occupy the rest of the palace.

I was taken into Gosselet's Museum. . . .

Sept. 11th, at nine A.M., Barrois brought Hall in his coupé to pick me up, and drove us both to Gosselet's house, and we spent three hours over the Devonian drawers. I took copious notes. . . .

Sept. 14, 1878. ANTWERP.

. . . I have my dear girls again, and am a new man. You know how dependent I am on outer circumstances for my happiness, and even for my ability to do my duty. This is a proof that I am neither a saint nor a philosopher. But as I lay groaning this morning in bed at the agonizing twaddle of the stable boys opposite my window, which had endured since five o'clock, and at the brushing of boots, coats and carpet in the little entry at my door, quite unable to rise above the bed and so much complicated misery, a rapid step, a tiny knock—how well I knew both!

He had been seriously unwell much of the time during this trip, anxious and depressed, but gradually his strength returned, and he writes, Sept. 9, 1878, "To-day I feel for

the first time as if I could lecture again, and even with interest and pleasure." He returned to work, and soon was as actively occupied as usual.

A few of my mother's letters of this same summer:—

KITTERY POINT, ME., *Aug.* 7, 1878. SUSAN I. LESLEY TO HER HUSBAND.

. . . It is a very small Hotel, called the Pepperell House, only thirty boarders here, several Cambridge friends among them, Mrs. Hopkinson and Miss Mary (Aunt Kitty's very intimate friends), Dr. Hedge's wife and daughter; he himself is at Mr. Weeden's, and seeing Meg this week, and Miss Emma Holland. There is a Mrs. Anthony who sings exquisitely every evening, but otherwise it is entirely quiet. I read aloud every day to the little Cambridge coterie, Dr. Clarke's "Vision," very deep, but interesting; or Emerson's late lectures, which are as vigorous as any of former days, especially the one on the New Republic, delivered only three months ago. What a born optimist he is, and how inspiring! Monday afternoon we took a beautiful drive with Mrs. Hopkinson, our host, Mr. Safford driving. We went to the Navy Yard, and I looked with interest at the house where dear Virginia Henderson lived two years, sweet creature! Then we crossed the bridge to Sullivan's Island, and saw the magnificent view of Portsmouth, Kittery, and Agamenticus, with harbor and islands. Coming back, we passed the dock and dry dock, and saw the little Kearsarge on the ways for repairs, such a mite of a vessel to have sunk the Alabama; and all the way home, we talked over the war, Mrs. Hopkinson telling many interesting stories. This place is famous as the home of Sir William Pepperell, the only colonist ever made a Baronet in this country. His old gambrel-roof house still standing, and in good keeping, is shown by the fishermen with great pride. He built it in 1635. His tomb is just in front of our windows, with the old sarcophagus so covered with moss, one can hardly read the inscription to the hero of Louisburg. He directed that his title should not be put on the monument, only plain William Pepperell. After his death Lady Pepperell built a very grand house, which our host showed us with much pride, and said she lived in such state as never was in this country. We are going to drive to old York this afternoon, the first incorporated town in these United States. It is full of antiquities.

DUBLIN [N.H.], *Aug.* 19, 1878. SUSAN I. LESLEY TO HER HUSBAND.

. . . This place, and this beautiful family are a great find, I am sure you would think it so. I did not dream that there were such primitive places left in New England, but there must be many off the line of the railroads, as this is,—the nearest one being seven miles away. There is not a tavern or public house of any description, and only one store, a variety store of dry goods and groceries combined. A few scattered homes along a hilly road, with the Orthodox church at the foot of the hill, and the Unitarian at the top, constitute the village of Dublin. When the neighbors collect in the evening, they read Shakespeare with intense interest, or have impromptu concerts, with the very best music.

All this family are musical, father, mother and five children. The little man of ten years old, a jewel of a child, comes in from a hard day's work, takes off his overalls, and torn hat, and covers his feet that have been bare all day, and stands by his sister at the piano, playing his violin with enthusiasm. Such children as these are the hope of the country.

I wonder if you get your *Christian Register*, and if you read in the 17th, which also had your letter from Antwerp, the fine Editorials on Co-operation, Faith in human Nature, etc. You might have written them yourself, you have said the same things so many times. . . .

In September, 1878, my mother and sister went to the Unitarian National Conference at Saratoga.

PHILADELPHIA, *Sept.* 30, 1878. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . The whole occasion was too much for me, and perhaps if I had realized it all, I should not have gone. The essays and discussions were all very fine, especially Dr. Carroll Everett's and James Freeman Clarke's. The meetings at the great Hotel, of so many friends, was all delightful, but very tiring and confusing. Think of two thousand Unitarians all congregated, over a thousand under one roof, and meeting at every turn the Ellises, Whites, Ferrys, Damons, Briggses, Bellowses, Ameses, Wares, Emersons, Mays, and Frothinghams, and scores of other acquaintances, with no time for any consecutive conversation, and a perpetual buzz and hum of conversation, very distracting. . . .

But before I quit the subject of Saratoga, I must tell you of a lovely hour I passed with Mr. Emerson, on the last day of the Conference. . . . He had gone to hunt up a poor young man with whom he formerly corresponded, but had never met, but whom after a silence of nineteen years, he had again heard from. I never knew anything like his interest in *persons;* it seems to me to grow stronger every year. Well! as soon as he arrived on Friday morning, he said, "Well! I hope the Conference is not over, I depend on going." So Ellen took him to hear Mr. Curtis' fine Essay on Reform of the Civil Service, and he sat through the whole of it, deeply interested. I had not expected to see him at all, and would not try to, but quite accidentally as I passed through one of the large parlors, I saw him sitting entirely alone in a corner, with his sweetest and most serene expression. So Meggie and I went up and spoke to him. He was extremely cordial, not a trace of hesitancy either in speech or memory. He told us of his journey, of his pleasure in the Conference, etc., then directly asked after Peter and Mary, wanted to hear all about their trip, even seemed to take great pleasure in Fanny Brewer's having gone with them, though he never saw her, but simply because he recalled the mention of her father in the memoir. He asked after Désor, and recalled very exactly a letter I had forgotten that I read him about Peter's visit to Désor two years ago. He asked Meggie if she still were devoted to Art, and seemed to take a personal interest in the matter. I thought he had remembered everything and everybody, when suddenly he turned to me and said, "Your beautiful book, I cannot tell you how many times I have read it over. I was made very unhappy because it was gone for some months, and I thought it was lost. No one remembered it had been lent to Lizzie Hoar, and after she died it was not returned. But a month ago it came back to me, and great was my joy. It is a unique picture of New England life, and of an individual character." Then he said, "Your excellent Aunt, who wrote so good a letter about Worthington,—where is she, and how is she? I would fain make a pilgrimage to Worthington, to see where those fine people lived." . . .

Throughout the conversation, I made not one suggestion, I was simply answering the eager and interested questions of one who seemed to remember everybody.

Then Mrs. Ames came along, bringing two very plain old forlorn-looking people, an old Mr. L. and a Miss S., who said they formerly belonged to Mr. Emerson's church in Boston, heard his last sermon, when he left the pulpit, and had not seen

him for forty years. Well, you never saw any one so pleased as he was! He made them sit down, and discoursed most eloquently of all the changes of his faith and feelings, and how glad he was in old age to find the earliest *essentials* of his faith unchanged. At that moment Ellen, who had been absent an hour, returned, and when she found her father so charmed with meeting these old friends, she went upstairs and brought down two copies of "The Fortune of the Republic," and two beautiful photographs of himself, and a pen and ink; and Mr. Emerson wrote his name in all of them, and date of presentation, and gave them in the most cordial manner to the old people, who went away perfectly enchanted. Mrs. Ames said they were parishioners of Mr. Ames's in Albany, that they had had the hardest kind of lives, and that she had rather this incident had happened to them than to any one at the Conference.

I believe that it was at this Conference that Mrs. Charles G. Ames established the "Woman's Auxiliary," later named the "Women's Alliance." This Association has been of the greatest value to the women of the Unitarian denomination, uniting them in general interest for the good of the churches.

CHAPTER XXIX

Organized Charity. 1878–1880

In the autumn of 1878 the citizens of Philadelphia were aroused to make a great effort to stem the tide of pauperism and vagrancy which had risen to an unbearable height in our city.

Already in Buffalo an Organized Charity Association had been established successfully; and nearer at hand, in Germantown (a suburb of Philadelphia), the same experiment had been tried for several years with admirable results.

Rev. Charles G. Ames and his wife, Fanny B. Ames, with Miss Lily Kay and others in Germantown, were able to advise with the Philadelphia workers, and soon a strong central committee was formed for the establishment of a Charity Organization, whose objects should be to suppress begging, on the one hand, and on the other to help the poor of the city efficiently.

It was a Herculean task. The idea was a new one in this country, and the motto of the society, "Not Alms, but a Friend," was misunderstood and even derided, both by the churches and by the mass of the population. We had been so accustomed to doling out pennies to the beggar seated at the corner, and food to those who came to the back door, that it was hard for us to accept the dictum that we were doing harm, and not good, when we "crossed" the extended palm with our pittance, and passed on. It was years before the aims of the organization were understood and respected, years before the antagonisms of rival charitable societies and churches could be placated, and a friendly co-operation be established between them, and with the Association. But by the persistent and patient efforts of many hundred devoted souls, this was all accomplished, and in time one of the most efficient agencies for fighting

the evils of a great city was firmly established among us. Honor to those wise and brave men and women who waged the battle in those early years, and are now gone to their rest!

To write the history of the Charity Organization of Philadelphia is not my place, had I the power. I wish only to speak of the part my mother took in its establishment.

The first work of the Organization, after the Central body was established, was to divide the city into sufficiently small districts to be cared for by local boards. For this purpose the *Wards* of the city were at first used. Later those wards which contained few poor people were sometimes united into districts, with but one local association. Each ward was to have a governing board and a corps of visitors. We lived in the 7th, with a population of 70,000 people, so that to arrange for the work of this densely populated region was like arranging for the care of a city. The same could be said of many of the other wards.

My mother's work, as the weeks went on, came to be to establish these local ward boards, and instruct them as to the methods and purposes of the Central Organization. In many cases she had the help of Miss Lily Kay, of Germantown, who knew the practical working of the system through her previous experience in her own town. Often Mrs. Charles G. Ames helped her, coming on from Boston expressly for this purpose.* But often she attended these preliminary meetings alone,—"establishing a Ward," as she says in her letters.

How she fell into this particular line of work I do not know. Probably it came to her because it was precisely the kind of thing she could do best. She held no official position in the Charity Organization, I believe, except as a member of the Central Board, and as a member of the 7th Ward Board. Her work was general and unofficial.

Her intisnctive knowledge of character, her democratic spirit, and her calmness and patience, all made her efficient in this particular line of work.

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*It will be remembered that Mr. Ames had moved to Boston in 1878 to edit the *Christian Register*.

The method was as follows: She would receive from the Central Board lists of persons living in a given ward who were considered likely to be useful in the work of that ward, when organized. She visited hundreds of such persons, and also those who stood sponsors for them. She instructed them in the methods of modern charity, told them of what had been accomplished in other places, and, if she found them interested and willing to join the good work, she often sent them pamphlets and reports, the more fully to establish their wise co-operation. Some of these writings she imported at her own expense, and distributed among her new acquaintances. One such volume, I remember, was Miss Octavia Hill's "Homes of the London Poor."

When a sufficient number of persons to form a Ward Association were thus interested, a meeting was appointed, and "the Ward was established." Then followed more instruction as to methods of organization and procedure, the committees to be appointed, the numerous corps of visitors to be sought for and put to work; and all the various activities of the association to be set in motion.

This selection of persons for a given position required much delicate management. My mother learned to make necessary compromises; to accept, *faute de mieux*, what was only half desirable; to be hopeful of untrained members of the body, as helpers. One must learn this in all public effort. She was firm also in never sacrificing the good of the work to a personal consideration of individuals. She would not advise that any one be given a place unless she felt assured that he or she were fitted to perform well its duties, or as well as could any one obtainable at the time. I think, however, that in spite of all the difficulties of this time of searching for the right people to fill the right places, she continually felt more and more satisfaction in discovering how widely social virtues were distributed in the community, how many people there were of good feeling, intelligence, public spirit, and real efficiency. The experiences of this first year filled her with hopefulness and enthusiasm, and with admiration for the earnest and strong men and women whom she found in every section of the city.

She always attended the meetings of the Central Board, and from time to time wrote reports on her work, and some occasional addresses, which were read before her own Ward Board or others.

Of course, this work of organization lasted but a few months, but it had brought her into communication with a great number of people, and for some time she continued to visit occasionally different meetings in various parts of the city.

At a later period her interests were chiefly centred in the work of the Children's Aid Society, which originated from the work of the Organized Charity Association. Later still, she was devoted to an educational and reformatory work in St. Mary Street, just outside of her own ward, where a Kindergarten and Day Nursery were established in what might have been called "Darkest Philadelphia."

Both these interests, however, I will speak of in a later chapter.

In 1878 my father gave up lecturing for the University, for the time being at any rate. In 1886 he was made Professor Emeritus.*

HARRISBURG, *Oct.* 22, 1878. PETER LESLEY TO HIS WIFE.

. . . I hardly hope that you yourself, my love, will be reasonable during my absence in the matter of your benevolent enterprises. You are overdoing it. . . .

The health of the brain in later life depends almost solely and wholly on variety of subject. . . .

PHILADELPHIA, *Oct.* 23, 1878. SUSAN I. LESLEY TO HER HUSBAND.

. . . I had a busy day yesterday attending to the dissemination of Dr. Kellogg's wishes about the City relief, in using some personal influence that he wanted, and I had a moderate degree of success. . . .

I note what you say on Benevolence,—and about giving the mind variety. It is what I say to myself a hundred times. But I have so little strength, that I can't always do what I would. The

* See Biographical Notice of J. P. Lesley, by Henry M. Chance, Appendix.

necessities and opportunities of real value tire me, and leave me less ability to be diverted than I wish I had. I have mostly great peace of mind and happiness in my work. . . .

After deploring some kindly but unwise interference in a project she had in hand, and speaking of the anxiety and sorrow she had experienced therefrom, she adds, "*The way* of doing a kindness is as much to me as the thing itself."

WILCOX, MCKEAN CO., *Oct.* 26, 1878. PETER LESLEY TO HIS WIFE.

. . . You break my heart with your tender loving letter, so sweet and uncomplaining of my injudicious and variable moods. I know so well all you do, and feel, and think, that, after my flurries of anxiety and impatience, I always return to feelings of resignation to the inevitable on your own basis; that, after all, *we must do what we can;* and that we must work while it is day, for the hour is surely coming in which all work ceases. It is only when I see you worn out with your incessant activity, spurred on by your affections and sympathies, and unsupported by a physique suited to such exercise of the body as might balance the activity of heart and brain,—that I fall into these fits of desperation in view of dreadful possibilities. Why you do not get out of all patience with me I cannot comprehend.

. . . I have read your dear letter again. . . .

I sympathize with you entirely in your feeling that the mode is often more than the matter. In this case it certainly was. But we must remember that few people enjoy the privilege of a *training in reticence.* Hence most of the ill-digested plans. Hence most of the shipwrecks of well-digested plans. Hence all the misunderstandings, ill-tempers, ranklings, animosities, wars. A world of deaf and dumb people would have more empty bellies, but fewer broken heads in it than ours; less "progress," but more peace. As it is, Society is a compromise between opacity and transparency. If we could not read each other at all—or if we could read each other's *every* thought,—in either case we should gain much—and doubtless lose more; for, in this twilight of intercommunication, and translucency of character, by which one man or woman makes out another man or woman only around the edges of personality, without ever seeing clearly into the depths of it,—a chance is given for the imagination, and lovers

can invest each other with all those qualities that attract them together; friendships become possible even among the unworthy; and society is cemented on occasion for good purposes. If in the next world, translucency becomes transparency, I do not see how "society" will be possible. All of a kind will herd together, and a carnival of clique will be the consequence.

I thank you for assuring me that you have mostly great peace of mind and happiness in your work. May it continue to be so. But bear with me for keeping before your view the unwholesomeness of perpetual, unintermitted, uninterrupted, monotonous work. If you cannot *vary* it, then manage to *interrupt* it, with days or weeks of inaction, or the equivalent to that. . . .

RENOVA, PA., *Oct.* 22, 1878. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Watch over your Mother and try to prevent her from turning life into a randan of philanthropy. She has a long hard winter before her, and I dread the consequences. Read novels to her, and if she will not listen to novels, read biographies. Buy some nice English biography in which she *will* take an interest; for she cares nothing for art, nor science, nor manners, nor politics, nor trade, nor nothing—except Unitarianism and sick people, and she will become a monomaniac and hopelessly melancholy. . . .

PHILADELPHIA, *Dec.* 24, 1878. PETER LESLEY TO HIS BROTHER ALLEN.

. . . *How* can you have a merry Christmas, when all your sheep are killed, and you live alone, in a land without either mountains or monuments? Besides,—to me all times are alike; except that a glimmer of hope is perceivable in my breast when the dreadful nights begin to shorten, and the good sun, the sun-god, the *real* Jehovah Jireh, turns to come back again. It is the true birthday of Christ and Osiris,—the 21st, not the 25th of December. And as for the 1st of January, it is an absurdity. If we celebrated the 22nd and 27th for the 5 intercalary days, the marriage contract between the lunar and solar year, and mixed a little robust heathenry with it, I might take some interest in it. But to celebrate the birthday of the saddest and sweetest of babies, on the bitterest and most cheerless day of the year, is an absurdity. No, I confine myself to the wish that you may very soon escape from the North, and be basking like an alligator in the swamps of Florida, and be happy all winter. I can't help

adding a half-wish that I was to be your companion; but I have swapped affluence for liberty, and of course economy. Besides, the State Treasury is empty, and we have no money for November, and none yet for December. I must stand to my guns as long as the enemy is in sight.

Meantime I amuse myself with the manufacture of indexes, painting maps, and such like apprentice work.

I have got through the first half of the third volume of Kuenen, and lost none of my admiration for the thoroughness and delicacy of his treatment, nor for the high positions already reached by the *constructive* criticism of our day. It is an amazing fact that the human intellect has kept St. Patrick's cow-bell in a chased gold box, covered with intertwined serpents with diamond eyes, 2000 years, without knowing that it was made of iron, and afterwards dipped in bronze.

Let us see you before you go. Come sit an evening before my fireplace, and sleep in a warm room, and put your legs under our breakfast table before you go. . . .

PHILADELPHIA, *Jan.* 5, 1879. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . There are various arrangements, between my board meetings which still keep on with unabated interest. The intense cold has brought Miss Kay such an avalanche of work in Germantown, that she cannot come in to all the meetings. Consequently, I have to organize alone, but am getting so accustomed to the routine of the work, that I do not feel as anxious as I did at first. Last Monday we both went to start the 30th Ward, at Christian and Twenty-second Streets, and had but just time to come home and get our tea, before going at seven o'clock to the 20th Ward, where we had a most interesting meeting, that being the Mayor's Ward, and a very fine set of women present. That was at Columbia Avenue and Twelfth Street, more than three miles from the afternoon meeting. Wednesday I had to start the 10th Ward women alone, but had done so much preliminary work among them, it was not as hard as some others. Thursday, Dr. Kellogg sent for me to take entire charge of the 29th Ward women, and I spent two hours with them in a vestry. On my way home attended a second meeting of 10th Ward. Friday I was out the whole day, talking from house to house in the 9th Ward, in preparation for organizing yesterday. . . .

Yesterday, I met the 9th Ward at the Central Office, and put through that meeting alone. Good to have but one meeting

in a day. To-morrow comes the tug of war. I meet the 10th Ward for final ratification at eleven, go over to West Philadelphia at three o'clock to the 27th Ward, and after returning for my tea have to meet the Executive Committee of the 9th Ward for private conference at one of their houses. If Lily Kay meets me, it will all go easily; if she cannot, I must get along as I have before. It is all very exciting and interesting, this great uprising of a vast city to organize their charities, and I often think if I were not too tired when I come home to keep the most meagre diary of the day's events and the fine women I see, whom I could never have known in any other way, it would be most interesting to refer to hereafter. But the days are going and I can do nothing of the kind. Much as ever can I answer the shoals of letters and postals, that come in reference to this work.

To-day I have been to hear Mr. May this morning, and Mr. Ames this evening. Spring Garden Hall crowded with an enthusiastic audience, and one of the finest sermons on living for future generations. It was very inspiring.

I do not forget my dear friends and relations, and feel grateful for all your letters, and thankful for any news of them all. In a few weeks my rush of work will be ended, and then I hope to do better. . . .

You know that I think of you always, even when I cannot tell you what a loss it is to me not to share with you the whole of these wonderful experiences through which I am passing. I half feel as if I had already landed in another sphere, as Hebrew, Catholic, Methodist, Baptist, Presbyterian, Episcopalian, Orthodox Friend, Hicksite, come to me with every kind of question, which they could answer better themselves, but which I have to try to, since they think I can. . . .

PHILADELPHIA, *Jan.* 19, 1879. PETER LESLEY TO MISS CATHERINE ROBBINS.

. . . I intended to shake off the load before the fine weather comes, and take a course of fancy; so that when the flowers spring, and the lambs begin to suck, and the ploughs begin to move, and the sun is getting across the equator, I shall be able to look upon life not as a treadmill, but as a park or paradise, in which to roam, and think of many things, and sing a little; and so postpone awhile the evil days in which I shall say there is no beauty in them.

One of my fancies is to visit you, and to do it with such leisure that there shall be no hurry in it. New England has become to

me a far-off land, almost as strange as if I never lived there; almost as foreign as if I had no friends there left. But a few days with you and them will cure all that.

It is wonderful how firmly an old tree gets at last to stand over its roots in the spot where it was planted! I always disliked my native city. But I have at length come to regard it is as my true home, and become reconciled to the once hated idea that I shall always live in it, and die in it, and be buried in it. My work now is no longer distributed over half a continent. It is so restricted to Pennsylvania and Philadelphia, that I scarcely feel any interest in what is or can be or will be done in other States and countries. I look up at my bookshelves, and count the long row of volumes which I have edited, and feel how great a field of work one single state may be. My volumes number twenty-three, and I shall soon see four more standing beside them, and ten more in all, this year. If the Legislature pleases to continue the Survey, our volumes of reports will number fifty. That will make a little library; and you comprehend that they must be as good as possible, for they are to last. They are not fancy work; they are full of solid and well-digested facts. You can imagine my henlike clucking over each of them. How anxious I am over every page, preface, index, map, diagram. But you cannot imagine what incessant thought and care it takes to guard against the insidious entrance of errors, follies, negligences, solecisms of all kinds. How omissions bore one, when one has concluded that the thing was complete! I sometimes feel like a physician in charge of a hospital, or with a large private practice; or like a Sunday School Superintendent out on a picnic.

With all this, I often think of you, and would gladly do something to give you an hour of enjoyment.

As it is, I must be satisfied with thinking of you and hearing about you from Susan and the girls,—about whom I do not write, merely because I feel sure their letters have told you all you wish to know. . . .

Feb. 3, 1879. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . There is something fine and inspiring in seeing all the Wards of this great city so regularly falling into line, and entering on so great a work in perfect unanimity; and there is much to excite admiration in the orderly and systematic way in which the whole thing has been conducted. I attribute it much to the Quaker habits of work which are traditional, and in many ways pervade other denominations. And William Penn certainly made

it easier for us in the monotonous way in which he laid out the city. . . .

ALGONAC, *Feb.* 12, 1879. SUSAN I. LESLEY TO HER HUSBAND.

. . . I enjoyed my journey yesterday, it was very resting. At Princeton dear old Guyot got in, and was lovely all the way to Jersey City, asked many questions about you and the Survey, talked much of Lesquereux, and with great affection. Do you know, he says that Lesquereux is a real poet, that he has quantities of his poetry, that he is great on occasions, like birthdays, anniversaries and such? . . .

PHILADELPHIA, *March* 3, 1879. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . Dear Mrs. Ames left us at seven o'clock this morning with Mr. Ames, who preached wonderfully at Spring Garden last evening. She has been with us a month, and given us a great lift in our work. She attended nine meetings with me, and spoke splendidly at every one. Miss Meredith says she doesn't think the service she did to our cause can be overestimated. . . .

[She advised the Cambridge people as to organization matters, adding:] But tell him [Archibald M. Howe] also, if he wants the very best and most efficient aid to be found anywhere, I wish he would go to Grantville, see Mrs. Ames himself, use my name to her, and ask her to be present at the very first preliminary meeting in Cambridge, and to make the opening address. No one in this country knows so much about the Charity Organization.—She has studied carefully, the Elberfeld, the London, and the Buffalo plans, and she and her husband really founded the Germantown plan, and practically carried it out for five years. They are really the originators of the whole movement in this country, and can teach anybody that is willing to learn, every rope in the ship. . . .

In March of this year, 1879, my father and mother and sister had a very delightful experience. My mother's cousin, John M. Forbes, invited them to join a party consisting of himself and several of his family in a trip to Florida, where they spent a month in his cottage at Magnolia on the St. John River. It was a never-to-be-forgotten time of peace and rest, and was of great benefit as well as pleasure to both.

MAGNOLIA, *March* 15, 1879. SUSAN I. LESLEY TO HER DAUGHTER MARY.

Cousin John is the "biggest Dear," so kind and thoughtful of everybody around him. 'Tis so rare to see any one who does such large generous magnificent things, equally careful about the least and minutest that will give any one any pleasure.

March 22, 1879. TO THE SAME.

I was speaking to Cousin John when I stopped writing. One can never put into words all one feels about him, and I shall not try. Ask Sarah to show you the passage in "Social Aims" which refers to him.* We should not talk about it, but I want you to see how well Mr. Emerson understands him.

MAGNOLIA, FLA., *March* 28, 1879. PETER LESLEY TO MISS CATHERINE ROBBINS.

. . . I am getting to be a lazy man and hate motion. This quiet river bank, these groves of live oak, in front of the row of seven comfortable cottages, connected only by a board walk an eighth of a mile long, with the hotel at the far end, and the steamboat pier jutting far out into the broad and shallow river—especially the lovely lights after noon falling on the low wooded river shores, and the cove to the right—the little wherry in which I row Margaret up the creek between the lily pads to her two favorite sketching sites—the quiet smoke with Cary in the dark upon the porch every evening,—and the undisturbed hours for reading in my own room upstairs, only broken by Meg's painting at my portrait while I read the "King of Noland" to her—all this

* "It was my fortune, not long ago, to fall in with an American to be proud of. I said never was such force, good meaning, good sense, good action, combined with such domestic lovely behavior, such modesty and persistent preference for others. Wherever he moved he was the benefactor. It is of course that he should ride well, shoot well, sail well, keep house well, administer affairs well; but he was the best talker, also, in the company; what with a perpetual wisdom, with an eye always to the working of the thing, what with the multitude and distinction of his facts (and one detected continually that he had a hand in everything that has been done), and in the temperance with which he parried all offence and opened the eyes of the person he talked with without contradicting him, yet I said to myself, How little this man suspects, with his sympathy for men and his respect for lettered and scientific people, that he is not likely, in any company, to meet a man superior to himself! And I think this is a good country that can bear such a creature as he is."—*R. W. Emerson* (of J. M. Forbes), *Letters and Social Aims*, Riverside Edition, p. 100.

is more heavenly than earthly. In the evening we play casino with John Forbes, whose gout has laid him up for several days.

But "in spite of all temptations" I get frightfully homesick. . . .

PHILADELPHIA, *April* 10, 1879. SUSAN I. LESLEY TO HER COUSIN MARY CUNNINGHAM.

. . . I thought I should certainly have written to you while I was in Florida. For I longed to write to you while I was really resting, really looking out on the lovely St. John's, or rowing in the creek between the lily pads, or watching the sun rising and sun setting in that exquisite climate. You remember Mr. Emerson says, "Go out of the house to look at the moon, and it is mere tinsel, but let it shine on your solitary or necessary journey, it is all things to you," or words to that effect, for I quote from memory. So also I think he would say that one who has passed many months, in wandering up and down the purlieus of a great city, without any let-up, would find herself in heaven, when a great heart and warm hands picked her up and set her down in this Paradise, for a whole month of rest and silence and nature and bird music. No contrast could be greater or more refreshing. . . .

Returned to Philadelphia in April, she took up her work, but was interrupted by a severe illness, from which she did not fully recover for many weeks.

July 2, 1879. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . I long more than ever to recover my health, and to renew and save my powers, for Father's sake. But one strong effect of last winter's over-activity of brain and heart, has been that I find it most difficult to divert my mind from these deeply interesting problems that I have worked over so long, and which now *tire* me. If I had strength and *muscular* power, I could change the current of my thoughts. . . .

. . . This weariness of brain and nerves is harder to manage than any physical pain. How much I feel for dear Father, and the long years he has had to fight it. . . .

In the summer the family found a pleasant and quiet hotel at Media, near enough to the city for my father to

come and go as he chose. For several years they used this as a retreat from the noise and heat of town.

July 8, 1879. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . Father's labors seem to me those of Sisyphus, but he is cheerful and contented, and enjoys his evenings and nights here. . . . He has had a visit from Lesquereux, who is delighted with the success of the fossil atlas, and has had beautiful letters from distinguished men in different parts of Europe, thanking him for his valuable researches. This makes your father very happy. . . .

PHILADELPHIA, *July* 15, 1879. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . I send you a clipping about Roman Schools. There is something very picturesque about it, but not very practical. Very antique, but not comfortable.

I love to think of you among the great oxen again [on the Rhode Island coast], and on the sand dunes, and among the Hales and Weedens. Enjoy it all you can, but cultivate a calm and unhurried spirit. Postpone one thing for another, so that none may be spoiled. It is not how much we do or enjoy in this life, but what kind, and how well and fruitfully.

I preach what I never practised, therefore I wish you to practise what I preach.

. . . I am as busy as a bee, very cheerful, and really well. Have finished my *bête noire* Q Q,* and commence Q Q Q, and other things. . . .

MEDIA, *July* 25, 1879. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I have been sitting on the piazza in my big chair, doing one hour's reading, as I do each day, in statistical works on Pauperism and Education, to fill my mind as far as possible so as to answer questions that will be asked next winter. . . . Then I put the whole subject away, and read novels, or take naps until evening. . . .

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* The Reports of the Second Geological Survey were designated by *letters*.

MEDIA, *Aug.* 4, 1879. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Your mother . . . has greatly enjoyed Deborah Wharton (82) and Beulah Coates, and so have I. I am falling in love with the Quakers in my old age.

I rejoice in your enjoyment of your habitat, and do not wonder that the rural scenes satisfy you. When I was your age, I was ravished with the beautiful buttons on the waist of Nature's dress. I saw her white throat peeping from between and above them and her long tresses floating down over and among them. Every leaf sang me a song of paradise. Every pool of rain water left standing between two furrows in a field was a Mediterranean Sea, and Rome, Athens, Ephesus, and Alexandria stood upon its shores. Happy girl—happy boy—who can thus love the wrinkles in her father's and mother's face, and see the soul of beauty smiling out from everything. God keep thy dear young heart fresh and green, that it may be like Deborah Wharton's and Beulah Coates's at fourscore.

This is the prayer of your loving father. . . .

From Idlewild, Media, in August my mother went East, visiting first her old friend Caroline Briggs in Springfield, whose sister Anne Merrick, equally dear to her, had lately died.

SPRINGFIELD [Anne's Room], *Sunday* P.M., *Aug.* 10, 1879. SUSAN I. LESLEY TO HER HUSBAND.

"Only the actions of the just,
Smell sweet and blossom in the dust."

"And the house was filled with the odor of the ointment."

MY BELOVED PETER,—These words came involuntarily to my mind as I sat here all the morning with Caroline, Dwight and the boys coming in and out. It is their usual sitting-room now.—"Shall we sit in Aunty's room," and "Come, let us go to Anne's room," say they all, as they rise from table—all so natural, so cheerful, so full of rejoicing over a precious memory. Caroline has been reading me all the letters that came after her death, some such wonderful testimonies from people they scarcely knew, letters from soldiers whom she nursed in the war, and the little Drummer Boy, now a man, whom she held in her lap,—such noble letters from clergymen, servant-girls—every one. . . .

She remembered every one—commended Dwight to her son's special care, was cheering and blessing every one to the very end, and her face shone as though it were the face of an angel.—"Oh, Mrs. Merrick, you look like a beautiful young girl," said the Doctor as he lifted the curtain to look at her for the last time, and she smiled and said, "Yes, Doctor, we shall all be young there." No one sheds a tear when they speak of her, but Dwight is the one mourner who cannot be comforted.—"My Queen bee has gone," he said, "how can it be home without her?" Caroline is a marvel to me,—she lives in heaven. . . .

MEDIA, *Aug.* 24, 1879. PETER LESLEY TO HIS WIFE.

. . . How inspiring are books written in genuinely free spirit and on subjects which have been digested by cultivated and well-balanced minds, in a style disciplined by many years of practice in writing! I still find great delight in Conway's "Demonology." Its beauties are inexhaustible. I wonder no less at the chaste perfection of his style than at the fecundity of his reflective and generalizing powers. I have been reading his chapter on "The Trial of the Great," sitting in the corner of the veranda, after breakfast, with the couples and trios of boarders walking about, stopping to inquire whether the rain will cease, and making up their minds to go to church. . . .

How often I have thanked you . . . for respecting and encouraging my liberties! I have tried to reciprocate the compliment and favor.—Not always successfully. But two horses harnessed to one pole must perforce observe each other's paces, or else the wagon cannot keep the road, nor reach with its precious freight its destination.

It is Sunday, and the first for a long time in which I have felt not the slightest disposition to write a word or think a thought connected with my business. My mind has been turning of late in the direction of old objects of interest from which daily tasks debar me. But to-day it is as if I had been in a stage-coach for a night and a day, and a delay had occurred, and I was stretching my legs around a country inn, idly counting the chickens, watching a bull and herd of cows in a neighboring meadow, a waterfall and mill wheel down on the stream, a distant mountain top in the sky above a strip of forest, two horsemen descending the hill by the road ahead.

You remember such passages in your early life no doubt? I remember many such.

To-day I feel just so. McCreath's book is printed; White's

Lawrence volume is printing; White and Fontaine's Flora is stereotyped, and I sent Charles [W.] Ames' Index of it yesterday to Harrisburg; and the 110 pp. MS. of my rewriting of Part I. of White's Mercer report was finished yesterday morning.

These have made up my long stage ride. Now I stop—for Lesquereux's MSS. composition is started; but I have nothing to do with it, Lesquereux and Charley reading proof and without reference to me. It is a blessed chance to stretch my legs, and look at the cows, and mill, and mountain top.

I have had lonely hours, one or two at the close of each day, during which I have fixed on the next morning for a stampede to you and the girls. But every night has brought me sound sleep, and every morning fresh courage, cheerfulness, and interest in the duties of the day, and of consequence, a postponement of my escapade.

Now the inevitable approaches. Harden has made a beautiful thirty-foot section of the dolomites; has a magnificent twelve-foot mounting of the Blair Co. map; and will finish to-day the addition of York Co. to the great colored Geological map of the State,—so that with these three noble illustrations of our work, I can appear creditably and acceptably before the Association at Saratoga on Wednesday. . . .

By the way what a crazy style W. M. B—— has; see his *Outings* on the first page, first column of the *Register* of last week. There are plenty of fine thoughts; but the style is outrageous. Now that Emerson's influence on the thinking of his age has done its work, his influence on the writing of his disciples is getting to be intolerable. The young fellows all write with the steam in their boilers at 120°, and before they lose their enthusiasm their style will have become incurable. It is refreshing to read Stebbins *versus* Frothingham, for his style is sober, clear and yet pithy. But he does our absurd friend Octavius injustice for all that. I wish Ames would annotate such articles, for they do some little harm, although probably much more good. Stebbins keeps his eye on true science and true theology. Frothingham was criticising popular theology as against true science. Another man might criticise popular science as against true theology; and a third might tell a great deal of truth in comparing popular science with popular theology.

I wish I could afford time and brains for a paper on the *truth* of the "charge of their antagonism"; I should oppose both the statement of Frothingham, and more yet the statement of Dr. Stebbins.

Its opening paragraphs however are really admirable, "Well and wisely put" as Emerson would say.

But the latter paragraphs are false. *True* science (as Frothingham says) sees nothing "crooked" or "evil" in Nature. All the theologies do; the most scientific theologies do this most; the ground cursed for Adam's fall; childbirth dolorous for Eve's sin; the flesh to be trampled under foot; the sea to disappear in the millennium; nations destroyed for their ceremonial unrighteousness; the world to be burnt up so that a *new earth* may be made, which shall be good and not evil. . . .

What an awful long letter I *have* written you! . . .

Have I atoned by this document for my shortcomings, in the form of post cards and half-pages? Ah, you don't know how hard it is for me to write a letter, when at every paragraph a voice behind me whispers: "How about that roll of proofs?" "Have you finished Carll's drainage map?" "Bien is waiting for Frazer's Susquehanna section, which nobody but you can do." "Are you not going down to the A. P. S. to-day to reply to the letters there?" "When are you going to Harrisburg to look at McCormick's slates?" "What do you think about the risk of letting those two hundred pages of Q Q Q go to press without rewriting them?" "Have you examined that pile of G G MSS. sent in by F. P. day before yesterday? You know the sections must be all arranged by you for —— or he will get them wrong." "Have you answered Andrews' urgent appeal for a reply, about the Appalachian Pre Coal Age erosion?" etc., etc.

How *can* a fellow indulge himself with anything but a cool post card to his Susan under such trying circumstances? I postpone writing in the morning, until I get through my work, and then I must make a rush for the cars, even if B. or H., or both of them (as yesterday) do not come in at the last moment to drive me wild with questions while I am putting on my vest and coat, or changing my shirt. . . .

MAGNOLIA, *Sept.* 8, 1879. SUSAN I. LESLEY TO HER HUSBAND.

. . . Before breakfast . . . I took a great foolscap sheet of paper, and blocked out my paper for the 7th Ward annual meeting in October, dividing and arranging the heads of subjects that have been seething in my mind all summer. I can't tell you the comfort of having this framework to build on, it seems more than half done already. . . .

PHILADELPHIA, *Sept.* 10, 1879. PETER LESLEY TO HIS WIFE.

. . You cannot imagine how grandly our geology in the Northwest is framing itself, and how rapidly all our doubts and difficulties are resolving themselves, like clouds after a long spell of wet weather. White has retired to Morganstown triumphant, and Ashburner is swooping through Forest County like a falcon.

Everything at Harrisburg and in New York goes admirably well also.

I greatly enjoyed your story about blocking out your address, and have been continually thinking with glee of your writing it. I have watched you pursing up your mouth, as you sat in your chair, with your portfolio on your lap. I shall be proud of it when it is done, and you let me criticise it. And how severe a critic I mean to be! I must not let a weakness be passed over, nor a solecism escape, nor a "very" play fly in amber. So prepare yourself to defend your thesis, as Luther did at Wittemberg. . . .

I have had long letters from Professor Andrews and Professor Orton of Ohio, on the geology along the line. The *harmony* will be established before long, by the united efforts of seven or eight persons, and *that* child will *stay* christened . . .

GRANTVILLE, *Sept.* 12, 1879. SUSAN I. LESLEY TO HER HUSBAND.

. . . Yesterday C. took a carriage and drove his Mother, Mrs. Baker and myself to Wayland to call on [Lydia] Maria Child. We had a very interesting call. She was enchanted to see us, and as chatty as could be, told lovely stories. She sent heaps of love to you. I showed her Lesquereux's fossils, which delighted her. The day was heavenly, clouds, shadows, water, foliage, all in perfection, with the sparkle of these early autumn days. . . .

PHILADELPHIA, *Sept.* 21, 1879. PETER LESLEY TO HIS WIFE.

. . . How tedious is the life of a man!—of a man whose hobby has developed a splint, and been turned out hopelessly to grass to die!—of a man who has spent his time of late like a surgeon in an army under retreat, stopping to see to so many wounded by the wayside that he is at length left far in the rear, and the skirmishers of the great enemy close at hand;— of a man from whose heart has gone out that "vital spirit of heavenly grace," the open and confident faith in immortality, which has made so many last ends of life better than beginnings. . . . 8.30 A.M. We have breakfasted, the girls and I alone together, as usual now, and I feel *much, very much* better. Those potatoes did the business,

as Charles Lamb said of the roast pork. How our faith depends on our teeth more than on our brains! Carlyle called Alcott a potato philosopher. Surely that Christianity which is generated not by fastings, but feastings, deserves the cognomen of potato philosophy.—But Mary is reading about the Irish famine in "Castle Daly," and I cannot write.

Ten-thirty A.M. There I have been reading and listening to the pretty story for two hours; and now the girls are drawing on their gloves for church, without knowing whether Mr. May has returned to town, or whether Dr. Furness will preach for him instead.—How intensely we appreciate a picture of the secret histories of people, when the picture is well and distinctly drawn! How the intensity is heightened when the fates of individual men and women shoot like gold threads through the broad fabrics of national commonwealths! To gaze abroad over the times of a revolution, is like seeing from a headland the rage of the ocean in a storm; and however grand the multitudinous cloud masses and tossing billows, let a sail appear, and the whole world of confusion concentrates itself there. We watch the rise and fall of the little speck as if it were alone in space, yet with such anxieties as only the devouring demonic concourse about it could suggest. This is the secret of the fascination of the genuine historical romance. Those who read them habitually (eschewing society novels), although never leaving home, become travelled people, and have seen many countries and lived in many ages. We are happy to be born and die in the Nineteenth Century,—the birth century of the historical novel. Nor is it wonderful that the best intellect of our generation has betaken itself to this most refined, most arduous, and most effectual of all the educational professions. By the influence of writers in this line, nations are being graduated in a university course of political economy and ethics. Revolutions followed each other in an endless series, so long as they marched too far apart to see each other. Now that they are collected and exhibited to each other, they die. Revolution has ceased to be a method of evolution in history—at least for a large portion of Christendom. It only requires time, and all peoples on the earth shall comprehend the necessities and ameliorations of the present, by looking intelligently on the painted cures for former woes of mankind.

Can there be a better cure for the personal heart's sickness, than this kind of reading which calls upon the heart to forget itself, and behold the crowds of its fellow-creatures,—to stand up and shake off sloth and self-seeking, and participate in the

generous well-doings of the day? I trow not—even I—who have lived so selfish an inner life,—even I—who have almost lost sympathy for my kind, in the gradual pressure of my own feeblenesses and needs. The time must come when I shall gnaw through the cocoon which with my tail I have spun about myself, and fly forth once more free, and for the first time wholly instinct with disinterestedness,—observant of the not me—and recovering hope and renewing faith through the abolition of all personal desire. Miracle! But is the time for miracles past? . . .

BRUSH HILL, *Sept.* 17, 1879. SUSAN I. LESLEY TO HER HUSBAND.

. . . With regard to my poor little address for the 7th Ward sisters; it is the most commonplace thing in the world, a mere reiteration of what every one knows, and not an original or striking thought in it. I should be quite disheartened about reading it, if it were not that I know all people engaged in such a work need the frequent repetition of certain central ideas; and if it is done in an affectionate spirit, even such work has its place, and does its small measure of good. Our good Miss Hallowell is visiting all the Reform Schools this week, at Deer Island, Westboro, etc., and I have been writing to those who will facilitate her investigations. Daily I rejoice to think I have lived to see the dawn of such a grand movement, and to bear my small part in it. But I do earnestly resolve not to bore you and the dear girls with it this winter, and not to be so absorbed in it as to be good for nothing in my own dear home. I had yesterday a most kind note from Dr. Cadwalader, telling me that he had been to Saratoga to the Social Science Meeting, and had there heard Mrs. Leonard make an admirable address, clear, forcible and practical, on industrial training for children, and he wished me to invite her to address our next quarterly meeting in Philadelphia. I wrote to her yesterday, and shall probably get her reply tomorrow.

. . . The weather is perfectly heavenly now, and I enjoy every moment of it. When I wake at five o'clock every morning and throw open my blinds and see the rustling leaves and the sunrise clouds and the glimpse of the Blue Hills, and the silence and the sounds of early morning, I can say, "When I awake I am still with Thee, the darkness and the light are both alike to Thee." This place is so beautiful and so full of sacred associations. Oh! how I hate to think of its passing out of the family, as it probably will some day! . . .

PHILADELPHIA, *Jan.* 1, 1880. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . A week ago last Tuesday, I organized the 31st Ward successfully, and had a feeling for the first time that this initiatory work draws near its close. It has been fifteen months of very absorbing, but very interesting work, and I am grateful for all the opportunities connected with it. I am also thankful that my health is sufficiently good. But I am mentally a little tired, and shall not regret having some of the pressure removed. . . .

PHILADELPHIA, *Jan.* 22, 1880. SUSAN I. LESLEY TO SAME.

. . . I took these hours of waiting to write my paper for the Society to Protect Children. It was an excellent and undisturbed opportunity [while on a Sound boat, anchored fifteen miles below New York, in a fog], and I finished it before the boat started. . . .

PHILADELPHIA, *March* 10, 1880. SAME TO SAME.

. . . The winter has been a hard one to Peter, but he has borne up manfully. The complications of the Survey increase, because the new wave of business has taken away most of his best assistants. The young men are all marrying and taking permanent positions, and this obliges him to take new and untrained hands, and to do all their work into the bargain. . . .

. . . All this time, my outside work has been of the utmost importance.—Almost every mail bringing me notes from various Wards, asking for advice or information, or introduction to persons, or urgent requests from the Central Office, that I would instruct such and such persons, or attend meetings.

. . . The outside public have been far harder to deal with than last winter, for having found out that the Organization is likely to become powerful, the politicians fill the newspapers with adverse reports, making it far harder to gain public confidence. I go to see Editors, induce them to report cases; I visit privately all whom I can influence. My office, being nominal and self-imposed, has no prescribed duties, and is capable of indefinite expansion, so that any weariness I may feel, comes not so much from what I do as from what I *don't*, and can't do. It is the variety of interests that sometimes tires, but I am fortunately well, and have decided in my own mind, never to let more than two months go by without breaking away wholly for one week from these trains of thought, so absorbing and interesting. Only last week I was *so* tired. Dr. Hodge and Dr. Cadwalader

had both written me to send them lists of women from every Ward in the city, whom I would consider fit to go on Committees for all sorts of work and research. It required much thought, many visits to these gentlemen, and in many instances I would find some very unfit person put onto a Committee by some Director, which of course I could not help or controvert. But I could, by long journeys and private interviews, induce some equally strong women of the right sort to go on the same Committee, and so render the action of the unwise of small account. All the gentlemen, both in and out of the office are extremely kind and considerate, begging me not to overdo, to use a carriage when I need one, and are glad when I say I must go away for a few days. I tell you all these things because I know they interest you, but I should not care to speak of such particulars to others. If one keeps one's work quiet, one excites no jealousy.

On one of her short trips away for rest and change she writes concerning a Channing memorial meeting:—

Brooklyn, *April* 7, 1880. Susan I. Lesley to her Husband.

. . . I have been sitting all the morning in the church listening to all the eulogies of Channing, Letters from distinguished people and societies all over Europe, church beautifully decorated, and many minds from many denominations uniting to do him honor. It is all very fine, and I am glad to have seen it. At the collation in the chapel, I met many friends; . . . now I go to rest before it is time to dine at Annie White's with the Rufus Ellises. At seven we all go to the Academy of Music, where Robert Collyer and Henry Ward Beecher are to hold forth, also George Wm. Curtis. . . .

Philadelphia, *April* 13, 1880. Susan I. Lesley to her Aunt Catherine Robbins.

. . . A week ago to-day I went with Mr. May to the Channing celebration at Brooklyn. I had not thought of it a half-hour before, but I was glad I went. It was a very grand occasion, and there was very noble speaking, of which you have no doubt got accounts by the papers. . . . It was my own birthday too, and probably I had more recollections of Dr. Channing than most who were there. . . .

CHAPTER XXX

Seventh Trip to Europe. 1880

April 16, 1880, my father and his daughter Margaret went abroad again. It was an unusually happy trip for him. He was in good health when he left home, and the quiet of the journey with but one companion, and that one most congenial, was a complete rest for him.

On the Outward Voyage, *April* 26, 1880. Rhynland.

. . . You cannot fancy to yourself, my dear Susan, the *abandon* with which I have thrown myself into the important business of laziness. Instead of having Lesquereux's MS. written up, and Mr. Ingham's Board minutes, all ready for mailing on my arrival, I have not tried to pen one line of either. Still stranger—eight days passed without my *reading* one word out of any book! Yesterday afternoon I forced myself to select out of my pile Canon Farrar's "Life and Work of Paul." I was soon engrossed by it. . . . You *must* read it. It is learned, but it will suit you entirely. I have never read a more convincing argument, or more strikingly picturesque descriptions; and it has made me impatient to read his Life of Christ, written previously. He must have published besides these two, a book on the Apostles. He is thus crossing the ocean of modern theological historical criticism, over the track of Renan; and I confess that I find this life of Paul—less exciting and suggestive indeed—but eminently more satisfying to the mind and heart, both. . . .

I have enjoyed the voyage more than I can describe. Not an hour of homesickness, very few hours of anything that deserved the name of ennui. . . .

April 29, 1880.

. . . Wednesday night we had a great time. I entered the cabin and found an audience, just applauding a reading. I was led forward to a piano stool and informed that a lecture was expected. I suggested exciting [*sic*] question. Mr. Thomas asked how I knew that Siberia had risen five hundred feet in recent

times. I gave them an account of the rise and fall of continental areas, the ages of the great mountain ranges, and the dynamics of faults. An hour and a half was very agreeably spent in questions and answers, and I heard the Captain's chuckle from the far end of the Saloon. . . .

ANTWERP, *May* 2, 1880. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I finished Lesquereux's memoir this morning. . . . Tomorrow I shall begin on the minutes of the Board for Mr. Ingham, and then I shall have nothing to do but rewrite Dr. Le Conte's reclamation for the *Geological Magazine* and send it to London. I can then go with Meg to Verviers, or to Lille, and wait for my Perry Co. writing, painting the map, etc., until I get settled in Paris.

I have just persuaded six or eight of the Thomas party . . . to let me guide them to our "Christ calling Peter and Andrew," at the Church of St. André.* It would entirely satisfy your dear Mother, I feel sure. It always chokes me with emotion. I see in it the first act of Christendom; the creative fiat from which sprang the Church. At this beck of the hand sprang into existence the apostolate, preaching, martyrdom, the cœnobium, the confessional, the monastery, the Cathedral, the Museum, the University, the Canon and Civil Law, the Republic, Modern Science, the Hospital, the Almshouse, Cosmopolitanism, international expositions, and all the sweet and holy scriptures which fill our modern libraries, and transform the sentiments of modern society.

You cannot imagine the impression produced upon me by hearing a clatter of little feet, some in sabots, some in leather; and looking round I saw an interminable procession of boys and girls, many of them hardly more than babies, entering the nave from the West door, carrying candles and bouquets, and baskets of little paper toys and bonbons, followed by ten carrying in a long trough a huge wax candle, and ten more carrying in another trough four smaller but still quite large tapers. In the procession were five girls in white, with white veils pinned to their hair, and streaming down their backs. Great was the bustle until they were arranged before the votive altar of Flora (the Virgin

* "The Pulpit, in carved wood, is by Van Geel and Van Hool (eighteenth century). St. Peter and St. Andrew are represented in a boat on the sea, from which they are summoned by the Saviour; life-size figures, finely executed." (*Baedeker's Belgium and Holland*, 1891, p. 155.)

of May). Then our party mounted chairs and looked on over the heads of the circle of elders, which environed the crowd of children. Hundreds of fish-women, and market-women, and peasants, and small shopkeepers, streamed in and took an earnest part in the gay little ceremony. The children in veils sat on rude thrones, and each in turn mounted a rostrum, and made an oration to the Virgin. The priest was the busiest master of ceremonies, and made a little speech himself from the steps of the altar. Then he took the candles away from the children, and gave them cards, and dismissed them sideways, to go round the south aisle, and take their places again in the rear at the west end.

All this time the Christ regarded it not, but looked at Andrew and called him to come out of his boat; and Andrew regarded it not, but kept his hand on his own beating heart, and looked at Christ, unable to move; and Peter regarded it not, but stumbled forward, arms outstretched, to fall at Jesus' feet.

Here the nineteenth century played its Floralia in the presence of the first century, as grandchildren play their games in the same room with a grandfather, and lose all consciousness of his presence; while he in turn is buried in his own recollections and reflections on the life universal and eternal, and is quite indifferent to or rather quite unaware of the sweet tumult around him.

How I wished the Christ to forget Peter and Andrew for a moment, and turn his head, and look at the crowd of little ones!

How I longed to have the good kind priest (for I knew from his looks that he was one) direct the procession to the pulpit, and take his stand beside the Christ, and teach those lovely little faces to look up into that solemn, sweet, grand countenance, and read for them its world of meaning!

But it was not yet to be. We must still wait awhile. Flora in May,—the Christ in the sere and yellow leaf. No doubt this face and form has touched thousands of hearts since the great Flemish sculptor cut it and set it up, beneath that pulpit; and no doubt when the superstition of Belgium has died its appointed death, thousands of hearts will beat wildly or warmly, with remorse and penitence, and love, and holy hope, as they look upon the face which never changes, and the hand which always calls. . . .

Speaking of a relic preserved in this same Church of St. André, he writes:—

. . . Tablet B. on the south wall, being a bone of St. Augustine, looking like one of his vertebræ. It is probably more genuine than the rest; for St. Augustine had more backbone in him than any half-dozen other of the Fathers put together, and could have furnished at least a hundred separate churches with a vertebra apiece. . . .

. . . To complete my morning's letter, . . . I should tell you how I took the rest of the party to St. André's, where Miss S. and her sister greatly admired the natural look of the boat! and were absorbed in admiring contemplation of the crab crawling up the rock!! and went into ecstasies to find the net full of fish!!! but they didn't seem to see Jesus, "for such eyes are holden."

They read their Baedeker assiduously while sitting at his feet, and when they learned from it that a medallion of Marie Stewart was in the south aisle, they turned their backs with alacrity on the divine group, and scurried off to find her. This was happily accomplished. . . .

LILLE, *May* 8, 1880. TO HIS WIFE.

. . . The whole was enchanting. . . . The land is a garden. The vistas of road trees innumerable. Watercourses everywhere. Skies magnificent beyond description. Mustard fields in full color, like great patches and streaks of intense sunshine. Windmills appearing and disappearing in all directions. Lines of women and children, and sometimes men . . . two, six, twenty in a line—on their knees, slowly traversing the fields *weeding*. We must have seen many *thousands* of people at this wonderful work, . . . *weeding* the fields! think of it! . . . The work was going on all the way from Brussels to Tournai; and of course had we taken any other line of the scores which cross Belgium, we should have seen the same thing. All Belgium was on its knees in the young grass, clover, wheat, rye, potatoes, searching for the little tares which the Devil had scattered, and which the people do not believe in letting grow until the harvest,—as Christ did—and as we in America do. . . .

At Lille he visited his young friend, Charles Barrois, the geologist, and writes of his pleasant talks and walks with him, adding, "I had a whole morning of geology with Gosselet, and made sketches for a section of the Ardennes, between Mezières and Dinant."

Arrived in Paris, he and his daughter established them-

selves in a little hotel in the Rue St. Hyacinth, St. Honoré (Hôtel Prince Albert), where they spent a month most happily.

PARIS, *May* 17, 1880.

. . . You have no idea of how delightful it is to be able to work hour after hour, without the slightest fear of interruption. No hurry; every touch of the brush can be taken with perfect deliberation, and after the longest needful consideration. It is quite a new sensation. In fact I am living like an artist and my work has a chance of being fine. . . .

May 20, 1880.

. . . I worked at my map until eleven o'clock, and untied its . . . knot which I hardly dared to hope for last week. But I did it. I have reconciled Henderson and Dewees—Apollo and Pan.

. . . I got ahead of the crowd, and found Meg [at the Salon] seated before Bastien-Lepage's Jeanne d'Arc, which *is* a wonderful picture. Opposite it hangs Bréton's women in moonlight in the fields: one prone, one kneeling, one stretching herself, the rest still weeding in a long row. . . .

PARIS, *May* 21, 1880.

. . . [One day after a long walk, entering the Pantheon] I heard a ravishing male voice among the lights in the far off chancel, paid my sous, and seated myself opposite the pulpit. . . . I stopped to hear the sermon, which I understood for the most part and greatly admired. It was delivered with remarkable volubility, in a quite earnest tone of familiarity, in elegant language, with the most exquisite intonation and enunciation, and its theme was the virtue of suffering. You would have agreed with all of it, dear Susan, for I have had the happiness and profit of hearing you preach it to me many a time. Suffering is inevitable; nay, more, it is useful; nay, more, God loves it, and we should love it. The Stoics and other philosophic sects of antiquity denied the doctrine, either from a fatalist or from an epicurean point of view; all the unregenerate repudiate it, because the flesh wars against the Spirit. But Christianity *c'est la philosophie de la souffrance et de la douleur.* Then he applied it to the various examples of domestic infelicity, and showed how those who never suffer, or resist suffering, lose one of the blessed means of grace, while those who fall suddenly and unexpectedly from

happiness into grief, often pass from death into life and are regenerated.

He apologized in a charming manner for the familiarity of his discourse, and then finished with one of the earnest and impressive, although still quiet, appeals to his audience,—chiefly women—ladies I thought—to range themselves in the rank of voluntary and cheerful, hopeful, faithful and expectant sufferers.

As the audience streamed across the dome crossing into the north transept, for another service before the blaze of candlelight around the altar of the Virgin, I disappeared into the gloom of the great nave, and emerging from the portal, passed thoughtfully under the wonderful portico, out into the Place. Catching and climbing upon a return omnibus, I rode back the way I had come, through the gas lit streets, full of moving figures, across the bridge, past the *obélisque*, and jumped down at the end of the rue St. Honoré, meditating on the difference between the inevitable and evitable suffering, and how Christianity is the philosophy of the former, and science of the latter.

The doctrine I had heard, has kept Christendom in darkness for two thousand years. For man to accept sorrow as "dear to God's heart and Mary's" is to cut the sinews of progress, of benevolence, of science. It is to urge on fanaticism to flagellations and sleeplessness, to vows of celibacy, poverty and obedience. It is to dedicate palaces to luxury, and dying men's wealth to demoralizing endowments for laziness and incapacity. It leads directly and inevitably to oriental fatalism. It fosters a prefererence for gloom and discomfort and disease and crucifixion.

What the New Heavens and the New Earth call for, is a new Christianity—of joy, not sorrow—of comfort, not asceticism—of refined and ennobling pleasures, not the wallowing sensuality of monks and anchorites. They demand an organized revolt against unnecessary sufferings. Their almshouses, hospitals, pulpits, are to be quite different from those of the Old Heavens and the Old Earth. Wit, wisdom and labor, are to replace patience and submission. One by one the inevitable woes of mankind are becoming evitable. But the priest of Rome sees it not. . . .

PARIS, *May* 23, 1880.

. . . I have several most interesting communications which I should like to write for some of our newspapers, *Peacock's* or the *Penn Monthly*. . . . But I am so busy in other ways, that I postpone all non-perfunctory writing from day to day, until the fruit is dried up, the flowers withered, the milk soured, and the

meat spoiled. Besides,—"so much is said and so well said, etc." Why should another pen be thrown into the mêlée? Its absence will never be missed from the cloud of flying arrows shot from side to side so thickly (as the Roman story-tellers described the Parthian flights, and the old French historians said of the English Cross bows) that the sun is darkened, and the battle rages in the shade. Yet the *cacoëthes scribendi*, once confirmed, can never be eradicated. We all love the habitual. What one does most easily, one loves best to do. To me it is as much a joy to write, as for the wrestler to strain his muscles, or for the bird to carol, or for Ned Walker to prelude before a song-without-words, or for Susan Inches Lyman to organize a new ward.

May 23rd, 1880.

This freedom from responsibilities of all sorts, this ignorance of necessity, this luxurious get up when you please, eat when you choose, see whom you like, go where accidents suggest, and return by any route never taken before, is restoring me to my youth. Surely theologians have forgotten the first principle of happiness in describing heaven as a perpetual Sabbath; for that old Hebrew word is formed upon a fixed recurring number, and represents the iron rule of inflexible, inexorable law. How admirably Canon Farrar depicts its shackles on the soul of Saul, and the vehemence with which the enfranchised Paul looked back upon the broken fetters, and denounced them to his disciples! Let them lie—the accursed gyves! was his cry; and the cry has filled the air of Christendom ever since, and resounds from the overarching skies. In heaven there will be no marrying or giving in marriage—to the elements of earthly responsibility. In heaven, the American will always be at Paris. In heaven, Christ will walk before us through the cornfields and we will rub out the celestial grain in our bare palms. There will be no sun there to count the years by, nor moon, nor Gregorian calendar, nor leap year 29ths of February, nor eponym five days to fill out the tale of days, nor breakfasts, lunches, teas, dinners and suppers to force us to rendezvous at appointed times and places, with determined persons, over written menus. An omnibus will be at every street corner of the New Jerusalem to take us to any part of the universe we feel a fancy for, and no fear of the return bus having its board down with the horrid letter "Complet" grinning in one's face. The popes have tried in vain to Haussmannize Paradise. There will be no night there—for the Lamb is the light thereof. O liberty—O equality—O fraternity—what

must heaven be, when these symbolic words of 1789, forged with thunder and lightning, and painted in blood, have become infinite and universal themes, not merely of human philosophy and social organization, but of individual existence, without misunderstanding and without end? I do not know anything in Paris that so frequently and profoundly excites me as the legend *Liberté, Egalité, Fraternité*, cut or painted on every public edifice in this metropolis of the New World;—on the Catholic cathedral and the Protestant oratoire alike, on Bourse and Market, on palace and hotel, Prefecture and Mairie, fountain and park. What hopes may not humanity build on the ideas of a nation which was wise and energetic enough to invent and execute such a legend! I watch the legislation of France with intense and sympathizing curiosity, and I believe that here—here alone—at Paris—can the philosophy of society—social science—be successfully and completely studied.

Here alone—at Paris—can a philosopher find a *typical* example of law and order, tempering personal liberty—all interests balanced and cared for—the distinction of artificial classes repressed by the common sense of society—wealth accumulated by industry and secured to the individual, but lavished on the comfort, convenience, pleasure and enlightenment of the whole population—beggary and crime reduced to a minimum quantity—splendid ceremonial conserved without infringing liberty of conscience—asceticism permitted, but not encouraged—the noble rage of family pride respected, but not cringed to—strict marriage bonds made compatible with free love—the young more sedulously cared for than anywhere else on earth, but the reckless multiplication of human beings forbidden, not by parliamentary enactments, but by a concordat of the people among themselves. There is another side to the picture—but *this* is the broad side of it—the real side—the hopeful side of it, in which I more and more admire and rejoice. . . .

May 24, 1880.

We went to the Oratoire, opposite the Louvre, and found in the circular room at the end about fifty people. The clergyman came in and we began to sing the curious folk-lore sort of hymn tunes, which characterize the Protestant worship in France and Switzerland, and also (with a variation) in Germany—relics of the mediæval songs of the people derived from the music of the ancient church, and perhaps retaining traces of still more ancient prechristian en-chant-ments. His text was part of the

parable of the Sower; the third kind of soil, so very good as to give the best hopes, but so very rich as to produce an overplus of passions, anxieties and desires stifling to true piety, and hostile to all progress in the celestial life.

I cannot attempt to give you an analysis of the sermon, which was spoiled to us by the vulgar, vicious enunciation of the Protestant clergy—in such strong contrast with the neat, clear and distinct, although rapid, speech of the Roman priests. But all such discourses are spoiled to me personally by the lack of logical reference to the great facts of natural history common to the life of man with that of the lower creatures, and especially common to all that vast majority of the human kind even, in civilized and Christianized communities, which gets its daily bread with the sweat of its brow. Especially am I offended by the incessant use of mediæval cant words and phrases, the meanings of which have long since passed away. No clergymen of the traditional school seem to have an idea of the fact that many of their hearers have been converted a hundred years before they were born—that they *inherit* the real life and the spirit and likeness of Christ, in a way wholly different from that which the Christian-Jewish and Jewish-Christian fathers meant by the great inheritance. Why call upon Bartlett pears or Florida oranges or Norman gooseberries, or Bengal tigers, or Corliss engines, or Northampton girls, to be converted and born anew—when they are as perfect as the possibilities of the universe permit? Why lump into one denunciation, or exhortation, the Sistine Madonna and the ragpicker or harlot? Neither Hale, nor Brooks, nor Beecher, nor any other advanced and *scientific* theologian thinks of doing this —where, then, is the utility or profit or pleasureableness of listening to doctrinaire preachers who do? I cannot but think that it is better to be in communion with Robert Ingersoll and Richard Owen than with dilettante Christians, be their devotions ever so devout, or their chapels ever so delightfully set off with sweet hymns.

I write this, sitting by the bank of the Seine with my back against a great tree, worthy of the American woods. Across the path, with her back against another grand tree, and just at the edge of the water, sits your lovely sister painting a sketch in oils of the path and the bank, the trees and river and bridge of Suresnes in the short near distance. She has taken her *entrée* at Julien's for two or three weeks to try it, paid her 60 fr. for the month this morning, worked there until 11.45 this morning, walked back to the hotel (where I have been writing since break-

fast on the mountain ranges of Perry county), lunched with me at 12.15 on *filet de bœuf* and her sealed can of good country milk, while I drank my half-bottle of *vin ordinaire* and ate my bread and cream cheese—and then Miss Phœbe Natt coming in, we all three crossed the Tuileries gardens, descended the Pont Royal stairs, and came down the lovely river in the *mouche* past Bas Meudon, Sèvres, St. Cloud, to the Suresnes bridge landing. . . . Here sit Meg and I, and here will we sit until the six o'clock boat—to take us back to Paris—with millions of feathery duck-downy seeds falling about us on our paper, and tickling our faces, and getting into my ink and Meg's paint—and a thousand moderated locomotive whistles, cart-wheel rollings, hammer-strokes, cries of men, barking of dogs, neighing of white Normandy horses, rustling tree-leaves, carollings of birds—coming to us from both sides of the river and making it all a wonderful theatre scene in Paradise. . . . The more we wander about it, the grander and more unique, and debonair, and unsophisticated (will you credit it?) does Paris seem. Unsophisticated is the last epithet a stranger would find suggesting itself in regard to Paris, on his arrival—and the most pressing and insistent epithet demanded by all he sees and feels, after he has become familiar with its streets and people. They are all so like a crowd of girls and boys. There is such liberty, *bonhomie*, *abandon*, everywhere. Everybody looks at you ready to reply, if you will only say something. Everything goes on in the open air, in the face of the whole world, if the whole world chooses to look on. *C'est égal—n'importe*—it's all right—nobody seems to care what you do, say, think or feel. That's *your* business and nobody else's. It's like a huge school-room or playground or picnic. Life in Paris is a never-ending festival. Nothing seems serious or necessary. You need not wear hat or bonnet—hundreds of people are seen going about bareheaded. You can wear calfskin or wood on your feet—any color in your dress—enter unchallenged anywhere (if the *drapeau* is not flying over the door)—examine anything that is done or made—ask questions of anybody, with full assurance that you will give pleasure instead of offence, and get a smile instead of a snub. The older one grows, the more fit he becomes to live in Paris, and in precise proportion to his increasing inaptitude for life in any other place. The wit, wisdom, art and arms of a hundred generations have been exhausted upon this construction and adornment of the *chef d'œuvre* of human habitation. Other cities have been built,—Paris has been created. London wraps its great frame in cloak and shawl and pulls its

broad brim hat over its brows, so that you can hardly recognize form or feature, but Paris sits like a nude model, smiling, and easy to be painted. Rome is half a ruin. Paris is so fresh that it must let the Tuileries stand for the express end of realizing what a ruin is, so little does the idea come natural to its everlastingly self-rejuvenating life.

May 25, 1880.

. . . Thence I made my way past the primary boys' and girls' school-house of Paris, along the still quaint and very interesting old Rue Jacob, and Rue des Saints Pères, with my friend Reinwald's and other great bookstores (which I am afraid to enter) to the Quai Voltaire; looked in at the noble, lovely court-yard of the Hôtel Voltaire (which must be one of the most agreeable in all Paris); seated myself before a café, and while I drank a half-franc half-bottle of light *vin ordinaire*, amused myself with the innumerable foot passengers, who are here of a peculiar type, quite different from those you see on the other side of the river, —many neatly dressed elderly and often aged men, with refined faces, and stooping forms,—young literary men with black soft portfolios under their arms swollen with half-finished manuscripts,—ladies with books in their hands, bought probably at the Rue des St. Pères,—and English girls with their *fathers*—for the English girls with their *brothers* are to be found on the northern side. Towards five o'clock I strolled over the Pont Royal, and turned in upon the long terrace, near the far end of which, before reaching the steps down to the gate (in front of the Pont Solferino), I passed a crowd of two or three hundred people listening, from the elevation of twenty or twenty-five feet to the military band under the trees below. Going down to it, I found an immense crowd of 2000 or 3000 well-dressed people, surrounding the band. Part of them occupied about 1000 chairs closely placed in concentric circles. The rest made a wide border of standers, all intently listening to remarkably fine music. I was on the extreme verge and enjoyed it much. Outside, scattered about under the trees, were many hundred more, on chairs—family parties—nursery maids—babies—little tots toddling round after one another, or wheeling each other, or wheeling the sand in little barrows. As I cross the gardens diagonally towards the gate opposite the Rue 29th July (by which we always reach our hotel), I found scattered crowds everywhere, all of the same character. The whole park was full of them. There must have been 10,000 or 20,000 people enjoying themselves in this

rural fashion in the heart of this immense city. It was a heart-cheering scene. . . .

PARIS, *May* 30, 1880.

. . . We walked . . . to the Église Catholique Gallican, in the rue Cadet, and listened for two hours to the singular service, and then to the vehement sermon of Père Hyacinthe, describing his recent visit to Geneva, resulting in his reconciliation with his former friends and parishioners.

He is a smooth-faced, elderly, handsome, kindly priest, calm in demeanor until he gets excited; and then, quivering with emotion, with outstretched arms and rapid involuntary gesticulations of hands and fingers, he pours forth a stream of description, argument, explanation, historical statement, hopeful anticipation, precisely in the style of one of our best reformers. He is a strange cross between Henry Ward Beecher and Theodore Parker. I don't think any description would suit him better, however it might be elaborated.

His congregation was (to-day) small. His church building is odd—the organ poor—the singing queer—the altar service as simple as that of a small parish English church,—six candles, and a crucifix against the wall—that is all we could see. The people were an odd-looking, mean-looking set, and in America would be called come-outers or loose-enders, as far as appearances went. . . .

Monday, May 31, 1880, the last day of the month of Mary, the sacred month, and the most sacred day of the whole year, the Fête Dieu. All street processions have been suppressed this year in France, for fear of conflicts between the right and left parties—between the clericals and the populace. The streets however are empty and the churches full, and grand processions occur, with banners and candles, and little girls in white veils, and little boys in red, swinging censers, and priests carrying the host under a canopy.

No lack of Catholic worshippers in France, among the women and girls,—however deep the poison of Protestantism, socialism and atheism may have spread among the men. The republicans are certainly virtually Protestants, the democrats atheists. . . .

PARIS, *June* 3, 1880.

. . . The air opposite my window is full of glancing swallows (or martins), who seem to live in the holes in the opposite walls,

The chimney-pots of Paris are delightfully inexhaustible objects of contemplation; and quite as interesting to draw as fossils. They might be classified in at least twenty genera, and two hundred species. . . .

A manly, gentle-faced English architect, . . . just returned from Algiers, breakfasted with me yesterday, and told me Viollet-le-Duc was his intimate friend, and that he had himself translated all Le Duc's books, and that I could see (what he stopped in Paris to see) all Le Duc's drawings, and his wonderful map of Mt. Blanc, if I would visit the new room, set apart for them, in the Hôtel Cluny. I did so, and was amazed at the man's power as an artist and as a *Geologist*. I thought I excelled in drawing rocks; but I could enter as a student this wonderful room, and sit before Le Duc's water-color sketches of the outcrops of Mt. Blanc for weeks, to copy them to improve myself. There also are his plans and elevations of restorations for the government:—Carcassonne, Avignon, Pierrefonds, St. Denis, etc. He did as much as five ordinary men could in a lifetime; and so magnificently! The cuts in his book give a very faint idea of his original drawings. . . .

PARIS, *June* 9, 1880.

. . . The day has passed delightfully. . . . I left M. in the parlor, enjoying her last evening with her dear Hopes, for they start for Dijon and Geneva to-morrow morning. . . . They are the relic of a large family—that of George Hope, the model farmer, whom Robert Collyer admired so much—and whom you will enthusiastically admire when you read the modest sensible biography of him by his daughter Caroline. . . .

. . . George Hope was a Unitarian—lover of Channing—hater of aristocracies and unjust laws—and lover of all the laws of God and nature.

They have given me the book for you. . . .

PARIS, *June* 10, 1880.

. . . Mrs. Walker was in high excitement yesterday over the news of Garfield's nomination. Her husband thinks him a good man; all the world knows him to be an able man. He has known G. in Washington intimately for a dozen years, and guarantees his virtues.

This is a strange world; a wonderfully beautiful piece of cunning machinery. I cannot comprehend its life. The mystery deepens with our knowledge of its workings. As I walked

and smoked my cigar and dreamed of the past and future, men walked slowly through the little thoroughfare with baskets and bundles, selling this and that for a scanty livelihood, and they did not seem unhappy or even anxious; and yet how could they know that a sou would fall in their path! So the birds go hopping and pecking about all day, and there is sure to be a crumb here and a seed there, sufficient for their sustenance. I calculated that I could (if alone) live here for $300 a year. Three meals on bread and milk 5 x 3 = 15 x 365 = $50; a nice room in the fourth story, f. 1.50 per day = $120; clothes,— sous for chairs to hear music—three sous for an occasional ride on a *mouche*, or the top of an omnibus—a half-bottle of wine, once or twice a month—postal stamps to cover articles for American Newspapers, etc., etc. . . . $130.

There we are, you see, provided for life, and no wrinkles needed for the brow; provided the heart can be kept in order.

An old man went by shouting "*écrévisses vivantes*," and I notice that the natural force of his lungs was not abated.

A flute in the fourth story opposite trilled lovely bits of operas. There, thought I, is another pair of wings fitted for pecking up a different sort of seeds.

Girls without bonnets or caps flitted to and fro, in and out of little shops of all kinds, carrying *petits pains*, *fromage de Brie*, radishes, a newspaper, a bottle of wine, a fish, anything that the need of the moment, of some traveller, had called for. I could hear the jingle of sous—sous—sous—in imagination—all around me. The landlord gave Meg a parcel from the Bon Marché yesterday, and added with a smile, "you owe me one sou, Mam'selle," which she paid and he pocketed. "Ah, I am glad to catch you," said Miss Cady, the day before, as Meg passed her half-open room door at the head of the stairs, "I owe you four sous. You know I borrowed them at the Bon Marché."

But there are no *real* centimes here as in Belgium and Germany. Paris has risen to the comfort and luxury of sous; as London has risen to that of pennies; and San Francisco that of dimes; and nothing less is acknowledgable.

What order, what disorder, what shuttle-weaving of kinds and stations, supplies and demands, luxuries, necessities and economies, all around me! Intercalations, inosculations, anastomosing veins and arteries of life!

There is a little dog smelling about after a scrap along the whole length of the little street. Now he makes for the doorway of the little provision shop, next my hotel (about as large

as a mastiff kennel). Will he sneak in and steal something? No; he turns and trots away around the corner, as if he were not hungry. How funny the relationship between the milkmaid, the cow, the dog, the patient tin can, the unconscious provision dealer, and the English milord, into whose cup of coffee some of that milk will be poured, while he reads the London *News*, or *Spectator*, or *Times*, and speculates on whether or no Midhat Pasha has left Damascus because he is a sham, and could do nothing worthy of his bragging—or a hero, a Belisarius, banished for his virtues by a despicable, jealous Sultan, and a deceptive liberal Gladstone ministry. . . .

I wish M. would come back from the Salon. . . . I wish I had pluck enough to finish my report. . . .

After this month in Paris they went, by way of Langres, Porrentry, Basle, Baden in Aarau, to Neuchâtel in Switzerland, to visit again his old friend Désor. He again, as of old, filled his letters with sketches and maps, and seemed in the most light-hearted mood.

LANGRES, *June* 14, 1880.

The children are collected around Meg, and her gentle ways with them make it all very pretty. Now the sun shines again and the shadows grow dark and the white street glitters in contrast.

How do Ceremonials grow up in a nation—in Christian countries—in pagan lands—among tribes of savages—in all ages, savage and civilized?

There are three events always happening to mankind: marriage, birth, death.

These produce civil, social and personal ceremonies.

Marriage concerns the tribe, births the family, death the individual.

Hence the recorder—the doctor—the priest; three masters of ceremonies.

A crowd surrounds the marriage; a group the birth; the priest stands by the death-bed.

It is impossible not to have traditional practices, and finally ceremonials arise in relation to all three events.

For marriage there must be a record—a recorder—a bureau of record—history—archives—government—law.

For births there must be assistance—the midwife—the physician—the nurse—the relatives, all interested in various ways

about the entrance of another being into the community, to be provided for, to be educated (hence the schoolmaster, and the master of trade), to be disciplined,—who shall produce in future years joy for some, troubles for others. There must be opened a way through the crowd for the new-comer. But he or she must not be permitted to push too hard into and through the crowd. In coming years he or she will be a maker, provider, protector, procreator; his or her birth is a public event and ceremonials must attend upon it.

The Mother dies—the growth of the family is stopped. The father dies—the family is broken up. The child dies—a thousand expectations are frustrated in a moment.

He who can console, rearrange, save the family from dissolution becomes its priest, its little God. Has he done this for one family? Then he can probably do it for another. He is sought and found, time and again. He becomes acknowledged in the community. He acquires habits, he founds methods, he establishes his ceremonials. People are comforted in thinking what he will do and how he will do it when their turn comes. He teaches younger men out of the experience of his own long life. Thus the church is born on the earth—a special priest and a special church for each little community of marrying, birthing and dying men. These coalesce into cantonal, provincial, national, universal churches. The priest becomes one of a class more and more devoted to the care of families, more and more separate from other people in thoughts, words and actions. He becomes a standing, embodied ceremonial, impersonal person, a living representative of death.

Then he invades the functional life of the doctor and claims rights to invent and perform ceremonials for birth.

Then he invades the functional life of the civic recorder, and claims the right to establish and perform a ceremonial marriage.

Thus marriage, baptism and extreme unction become three sacraments.

He must live,—men and women must pay him for marrying them, for baptizing their children, for rising by nights to prepare them for the darkness of the unknown journey.

Do they oppose this?—He must invent sanctions for their obedience—a purgatory for the kindly and a hell for the ugly behaved.

Do they object? He must reason them into the belief. Hence the creed. Hence the rule of faith. Hence tradition. Hence the infallibility of the pope—of the bible. . . .

I was led into this train of reflection, first, by the sight of a picturesque little hamlet, past which our train fled roaring, as it crossed the Aube, yesterday; and again, by the sight of that *ouvrier* and his wife and two little children, with a little cloth spread out on the stone bench, under the trees, in front of the cathedral—last evening—and on the cloth a half-bottle of sour wine, and the quarter end of a loaf of bread.

Is that all your dear poor contented little group have for your dinner, every day? While I and my wife and my two children have all the world and its life can afford, not only of comfort, but of luxury—not only for preservation, but for edification—not only for the flesh, but for the spirit—going whither we please, gathering and spending, creating and enjoying,—surrounded by numberless friends, the choice of mankind; untrammelled by superstitions, traditions; unpersecuted by governments; emancipated from ceremonials; fearing neither purgatory, nor hell, nor death, nor poverty, nor temptations to crime, nor the envy, jealousy and violence of neighbors, nor the failure of crops, nor the lack of work;—worst of all fears, for both man and woman. . . .

What a strange life one leads, my Mary, when set loose of cities and flying around the open country, without a definite object of necessity—or an object of definite necessity—with a quiet heart to feel, and an unoccupied eye to gather in all the details of the scenery! How rapidly and incessantly the mind works up the materials for thought which pour in upon it from all sides! What long trains of reasoning are engendered and engender each other, by turns! How emotions of all kinds light up with a thousand colors these trains of thought, and turn arguments into convictions, and scenes into sentiments!

Once yesterday I found myself pursuing a long course of political economy, while Meg was dreamily gazing from her corner at the pictures, made to her by groups of cottages, surrounding some farm house turreted at the corners—or a line of quarries on a distant hill—or an old stone bridge of half a dozen arches over a little river, where the white high road crossed it,—or long avenues through a little forest converging upon the glittering front of a white sunlit château,—or a soft broad, cultivated valley through which the Brausse or the Aube or the Bar flowed down the plain of northern France towards Paris.

Political economy—the value of money—what had that to do with the broad outlying smiling landscape, over-canopied by the cloudlet-flecked sky?

There were men and women and cows and horses working

in the fields. And I got to estimating wages; and conjecturing the quantity and destination of crops,—how a disc of the surface of the globe, almost as large as the face which the moon presents to us, is all occupied with the eternal task of feeding two millions of human creatures packed within the fortifications of Paris.

Feeding and clothing them—because they were, in turn, occupied with the endless task of gratifying the wants and whims of thousands of travellers from all parts of the world,—keeping hotel for them—cleaning well-paved streets for them—driving them about to see monuments erected to attract them—making clothes for them, cooking mushrooms and truffles for them, pouring out coffee for them, cleaning plates for them, making knickknacks for them to take home to their friends, painting pictures for them to hang up on walls of distant homes, casting bronzes for their mantel-pieces, adjusting thermometers and barometers for them, teaching them to speak French, writing exciting books for them to read on their homeward journeys—and in doing all this, saving enough money for themselves to pay the farmers and drovers and wine-growers for 200 miles around Paris for bringing into Paris, by wheel and rail, in carts and on donkeys, by *grande* and *petite vitesse* the food and clothing wanted by themselves.

Then I thought how what Paris does with Northern France, London—that crowd of 4,000,000 people—does with the entire world; sweeping the sea of humanity, with drag-nets of all lengths, in all directions, and gathering in to itself the makings and growings of all nations and races and climes.

Then I thought how modern machinery alone made this possible. Great cities in our modern sense never existed until now. Thebes and Babylon and Rome were vast villages. London, Paris and New York are cities. The difference consists in the character of the house of which a village and a city is built. Mud hovels, with here and there a temple, a palace, a bath and an amphitheatre, cannot make a city, however their number may be increased, on any one river-bank. The city in our sense of the term is a vast magazine of useful and beautiful things, well made, well arranged, common to all classes, easily reproduced and therefore cheap, owned and tended and exchanged by men and women, free, busy, intelligent, having homes made secure by an abundance of the useful, made comfortable by plenty of luxuries, and adorned by the beautiful.

The cities of old were slave-quarters.

Modern cities are communal palaces.

The change was wrought by machinery; for suppose my

work as a slave is worth a dollar a day to my master; and he keeps me to my work by force, and takes my dollar or all but enough of it to keep me alive.

Suppose now I invent a machine which shall do my work for me. I immediately become free of my work, although still a slave, just kept alive by my master who still takes the dollar.

Suppose my machine will do *twice* my work. Then I become really free; for even if my master takes the whole dollar from me, my machine gives me *another dollar* to live comfortably on.

Suppose I invent a machine which will do my work a hundred times as fast or as much. Then I can either set 98 of my fellow-slaves free; or I can become rich—and have slaves of my own.

If now my invention is copied—and my machines are multiplied—and other kinds of hundred-fold machines are invented for all other kinds of work—then all men become free. For masters want slaves only for the produce of their labor. Besides, when produce becomes plenty, it ceases to be dear. If masters make money on the overplus of slave labor, when that overplus loses its original market value, so do the slaves.

Again, when machinery becomes powerful and abundant, the necessitous demands of society are over-supplied. Luxurious demands are then made on machinery. There is now plenty of corn and wine for all—let us have pictures and statues; and these are turned out in quantities for all. Sedan chairs and palanquins lose their bearers, and are replaced by carriages and coachmen; then by trains and drivers; then by railway trains and conductors and firemen. By this time slaves and masters are alike and all take seats pell-mell in the cars. . . .

NEUFCHÂTEL, *June* 24, 1880.

. . . Mr. C. had forced a huge roll of the N.Y. *Times* (with the Chicago convention in them) into my hands; but fortunately I stuck them behind my back at dinner, and getting up hastily left them there. . . .

What does one care for the delegates of the Chicago Convention among the *crêtes* of the Jura, and in sight of the peaks of the Oberland? There are no ballottings *here* for a presidential nominee. The position and dignity and function of every one of them was fixed from the foundation of the world, preordained and recorded "*in monumento ære perennius*"—so to speak, in poetical language and according to popular idea as to time and place.

In fact, however, as you and I know, every mountain sits as uneasily on its seat, and changes its aspect as constantly as a politician. Care streaks its face with the wrinkles of old age; and while prime ministers grow bald on the top of the head, the top of the head itself comes off from the mountains.

No matter—they grow more and more beautiful as they grow timeous—like your dear Mother. They re-create themselves in an eternal Idlewild. Like her they devise in their retreats showers for the thirsty field.

The difference between nobility and vulgarity stands most flagrantly in this:—that nobility from a height, sees broadly, and can act generously; while the vulgar eye, penned in a crowd, can busy itself with details only, and can act always as if there were no nobility and no height,—nothing general and immense,—therefore nothing profoundly based and reliable. Its superstition is a special providence;—the religion of noble souls is universal law.

We had an old Switzer and his wife in our compartment, but we kept our windows open, and the run down the Limmat to Rütli, and up the Aar, to Brugg, where the Reuss enters it, and then across the great molasse (gravel) plain to Olten was beautiful.

Here we changed into a Basel-Berne train and had a compartment of great magnificence and luxuriousness all to ourselves, as we took the line of the foot-slope of the Jura to Solothurn and Biel.

The exquisite charms of this scenery are, as you know, indescribable—I have always thought the pastoral scenery of middle Switzerland perfection; and the varied accidentation of the south-looking face of the Jura with its cliffs and ravines unsurpassed in the world. Every mountain range has a personal peculiar character all its own; not only to the geologist, but quite as much to the artist. But nowhere is this special personality more strongly pronounced and defined to the intelligence of the spectator than in this case where the destruction of mountains and plain, forest and field, castle site and homestead, rocky ravine and meandering river meadows is produced by the descent of the Jura rocks, into and under the Tertiaries of the valley, which are nearly or quite horizontal, and therefore so is the great plain in its main features. [Geological sketch.]

The villages and hamlets are beautiful and quaint, but the isolated farm-houses are my delight.

We changed cars again at Biel, taking ice-cream and beer

(not mixed) under the shed at the station where you and Fanny sat with me, and where all five of us sat four years ago. It was a cantonal fête and every house flew the white cross red flag of the Confederation, and hung out its cantonal pennon beside it.

Here a little gentleman of Neufchâtel and his fat wife brought into our compartment seven little children, two of them twins, and we had a merry time of it along the shore of Lake Bienne, and up the slope of Lake Neufchâtel to the town—where M. Berthoud just shook hands with Meg and waved his hat to me and was off home.

NEUFCHÂTEL, *June* 25, 1880.

As we sat at dinner yesterday, Désor grew facetious, talked of old times, asked after old friends . . . all personal questions—not those about the state of the country.

But he was all alive to my account of the oil regions and the progress of the survey. As he handed me some Viennese bread he said—when the Turks besieged Belgrade the Sultan demanded its surrender because the town was starving; but the Commander baked a thousand loaves of bread in the shape of the crescent and flung them over the walls among the Turks. So the seige was abandoned and the Austro-Hungarians bake their bread in that form to this day.

As he poured out wine, he said: they say in Würtemberg, when bad wine is served—"That reminds one of Prince Eugène," for after Eugène had taken Belgrade (long after the Turkish siege) he was feasted in Würtemberg and had to drink a large cup of bad wine without stopping; they tried to repeat the ceremony, but he refused saying, *Ich möchte lieber zweimal ins Belgrad hinein, als zweimal trinken solch schlechten Wein.* . . .

Oh, what a superb rainbow spire shoots from the bosom of the lake, into the sky! as I write. . . .

It rains a thousand times a year at Neufchâtel.

Yesterday—after dinner—Désor proposed to try a ride. The sun shone warm, the wind blew cool, the Alps were visible along the whole line of the front ranges, but only now and then a single peak of the overland could be for a moment recognized in the ever-rolling ocean of clouds.

We slowly wound up the mountain, talking geology as we went, Meg on the back seat, I alongside of Désor, he driving his fat white horse.

We reached a great height, and the lake, and the city and the

castle, and the plain of Switzerland lay spread out beneath us. We turned into the path which led to the Pierre à Bot, and there Meg and I descended, climbed through the forest and sketched the wonderful boulder.

Seated again in the carriage—Meg now in front and I behind, great masses of threatening clouds came rolling down the lake over us from the west.

We turned into the Valengin or *Vallis anguis*—narrow valley—and soon the rain came down. Still, Désor drove on. We *must* see the *revers des rôchers*. As we reached the forks of the road, and rounded the cliffs into the upper end of the ravine, the exquisite old castle started into view before us, perched on a Devil's wall, overhanging the gorge. We drove on up under its three great round bastions, and through the little town and out its back gate, and making a loop, came rattling back on the gallop, with locked wheels and umbrellas set against the dashing rain.

Down the long ravine we scampered and over the bridge, and on under the cliffs, and past the great rock arch, and out at the lower end, and from and towards Neufchâtel and then back in a long zigzag westward, and then round again and down the slope under the Castle and Bertha's tower, and through the city, in front of the hotels, and along the Mall and past the Cedar of Lebanon, and in under the incline plane for filling the shore of the lake and so home—drenched.

What a hurrah! I shall never forget this ride.

NEUFCHÂTEL, *June* 25, '80.

. . . As for writing on my report *here*, it is not possible, I think. What with geology, archæology, and the Alps in a state of great excitement—there seems nothing to be done, of use to other people. . . .

What superb books Désor has!

I am writing on a folio copy of La Fontaine's fables, date M DCC LV; the engravings glorious. Talk of the progress of art! Who ever sees such illustrations nowadays? Who ever writes such poetry?

Then there are piles of Petermann, which would bewitch the hair off a geographer's head.

A life-size portrait of C. Darwin hangs over the door,—and such a Dryo-pithacus as it is! I comprehend *Punch* at last—never did before.

The whole house is a museum of the Arts and Sciences; and

the quaintest, cosiest, old-fashioned museum, at that. In fact, I ask myself, am I asleep or awake? Is this Earth, or some other planet of the Solar System? And when I think of our underdone America I wonder that steamship lines can find any passengers at all westward,—and are not swamped with the crowds of *émigrés* fleeing back to Europe, like doves to their cotes.

. . . Do you know . . . that there are moments when Désor's furrowed face is both beautiful and grand? He is now one of the most strikingly picturesque of men. He has great dignity of carriage and language, and is very charming in his deportment towards all; everybody in the street takes off the hat to him. . . .

Then we went into the sitting-room of the Geological Commission of Suisse. . . . He showed me Faber's last four-sheet map, and gave me the sheets and map and sections of Appenzell, Escher Von der Linth's last work before he died, the description of which Désor is just finishing for publication by the survey.

He made me give him a full account of Hayden, and King, and Pumpelly, and Newberry, and his old crony Whittlesey, and Powell, and Wheeler, and Shaler, etc., etc. . . .

NEUFCHÂTEL, *June* 26, 1880.

. . . Last evening we sat at the supper table until ten o'clock, talking politics, reading telegrams, and discussing the connection of the Catholic clergy with science, and of the Black exodus with the future of the South. . . .

Gambetta's speech in favor of the government bill of general amnesty has taken Europe by surprise. . . .

June 29, 1880.

. . . My parting with Désor after coffee at 8 o'clock Sunday morning (June 27th) in the *porte-cochère* was touching enough. He offered me his cheeks to kiss, with a quick shy sort of affectionate impulse, like what a girl might show to a man she loved and was not sure of.

I put my arm around his neck and said that I must see him again next year. "Ah, it is too far," he said, thinking I meant America. "No," said I, "at Bologna." "Ah, well, Bologna is not so far—but"— "Well," said I, "I will come here then, if you cannot go to Bologna, next year." And so with a wave of the hand I left him.* . . .

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* Désor died in the spring of 1882.

After bidding his old friend farewell, June 27, he returned to Antwerp by way of Freiburg, Frankfurt, Giessen, Coblenz, Triers, Luxembourg, Verviers.

July 8, 1880. ANTWERP.

. . . *Read* "The Gospel of Evolution" by Dr. Elam in the *Contemporary Review* of May (1880). It is strong, temperate, well written, anti-Darwinian. . . .

You will be particularly struck with the paragraphs on page 719. "I say the supposed *struggle*, because in reality there is no such thing, in the sense here understood. . . . The destructive influences are so predominant, that the carnage is indiscriminate, and without struggle." "Natural Selection is merely an euphuism for a negation—a happy phrase for something that has no existence. In itself is *nothing*," etc. . . . His delicious irony on page 722 you will greatly enjoy, where he gives a bird's-eye view of Haeckel's procession of life forms: from *Monera*, through the *Amœboids* and *Planeada* to the *Gastreada*. "These latter are a very important order of beings. They are described minutely. . . . It appears, however, that . . . there is no evidence whatever of their existence at any period." From these, however, none the less certainly, sprang the Zoöphytes and sponges—and the worm tribes! Here comes in a gap,—the *Vertebrata* must have a spinal ancestry; but as yet we have seen no trace of a spine. "It costs our author nothing but a stroke of his pen to invent the *Chordonia* . . . developed from the worms. . . . Nothing more . . . the most trifling modification! . . . and we are at once provided with the root and stem of the whole vertebrate division. It is scarcely any drawback to this stroke of genius to say, that there is no evidence whatever that such an order of living beings ever existed, that no one has the least conception what they were like, or of any of their attributes. That they existed, about the Silurian period is *most certain;* otherwise the *Ascidian*, on the one hand, and the *Amphioxus* and the *Acranial* fishes generally, on the other, would have been left without an ancestor." "After this, however, we get on smoothly and well." *Chordonia*—Lampreys, Sharks, *Dipneusta—Sozobranchiæ—Amphibia*. "Here again a slight difficulty threatens, but only threatens. It is got over by the interpolation of another imaginary order of beings, the *Sozura* (*Schwanzlurche*), creatures resembling Tritons and Salamanders. . . . The *proof* of their existence is this: that they are a necessary middle term between the preceding and the

following orders! Further than this no one knows anything about them."

To combine reptiles, birds, mammalia, man, a stem was provided in a fanciful order of beings called *Protamniota*. Huxley says that he supposes no one is in a position to say what they were like. "Probably not," adds Dr. Elam.

It is all perfectly delicious.

Especially when he comes to Haeckel's Ape-men (*Affenmenschen*) of Tertiary times, lacking only speech. "The *certain proof* that these dumb men preceded us, is to be found in the science of comparative philology! And we are to expect to find their fossil remains at some future time, when what is now the bed of the Indian Ocean is unheaved and inhabited."

I join Dr. Elam and John Le Conte, and a thousand other men of science in their secret soul will join him with me, in asking: Is this Science? Has Huxley gone mad, to indorse such rubbish, shot upon the stage of human intelligence by the wild dreamer of Germany, . . . that Brocken-spenster of the dear old English Naturalist?

In 1869 and 1873, Huxley affirmed that he differed from Haeckel only on the subject of geological time; and that otherwise his evolution theory was an established *fact*. And that in truth no other theory could be said to have an existence, except one which he seemed to consider "too shocking and revolting to common sense," to do more than distantly allude to. "No doubt the reference [says Elam] was here made to what Mr. Herbert Spencer considers the effete and impossible idea of Creation."

You will find on page 726 the three arguments for evolution taken up:—

1. Resemblances and affinities, pointing to common descent.
2. Embryological development.
3. Palæontological succession.

"As a psychological study it is interesting to observe how many things are deemed *impossible* to the Infinite wisdom and power which (by the terms of the supposition) presided over the arrangements of our world, which are perfectly *clear* and comprehensible when considered as the result of blind chance, and the operation of mechanical causes only."

Good.

July 9, 1880.

. . . I have finished Elam's article:—he goes too far,—he gets angry and excited. So it is with all of them. The *juste milieu*

is always above our human capacities. But I am thankful for so earnest a protest against the prevalent epidemic scientific superstition of the day.*

The Liberals in Europe think that Jesus of Nazareth was the founder of the order of the Jesuits! Nothing shows the general ignorance of the masses here like this queer fact.

. . . But do not the Scientific Liberals think that either Bacon or Cuvier invented the doctrine of Creation? They write as if they did.

Let us keep our Christ and our God. They are the mountains and rivers of history. Without them there would be no life in human thinking. . . .

Extracts from my mother's letters of the same spring and summer, 1880:—

PHILADELPHIA, *April* 19, 1880. SUSAN I. LESLEY TO HER HUSBAND.

. . . Sunday morning . . . we all went to Tenth and Locust. . . . The church was packed, galleries full,—all to hear Wm. Henry Channing. It was an inspiring audience, and he spoke like one inspired; every word fell with a rapt power of persuasion, impossible to repeat.

. . . It was all a gospel of Love, the word of to-day, words of Hope, Courage,—Co-operation,—Love,—God, the great Socialist.—Here is only one sentence, caught at the close, from many rapid soulful utterances:—

"You have your bath; but what is a bath without a prayer? You have your *breakfast;* did you also taste the food which Angels eat? You come to church: have you made *yourself* a *shrine*—your heart a temple? God has loved you well, do you love your poor, outcast, despised brother?" I lingered to speak to Mr. Channing. He was very cordial, spoke with enthusiasm of Mother's memoir, and said he left it in England purposely, people

* Mr. Benjamin Smith Lyman says in his biographical notice of my father on page 23:—

"The Darwinian theory had then for a number of years been fighting its way, and had been the subject of warm discussion wherever scientific men were assembled; and Mr. Lesley participated, with inclination towards the theory, as he would occasionally confess, yet never fully adopting it. Twenty years later, when the theory had gained universal acceptance even among theologians, he was fully decided, and would at times express complete disapproval of it."

would not give it up, and I *must* allow him to put it in the British Museum.—So I consented.* I could not speak to him but a moment, there was such a throng of people about him. He was going to see Wanamaker's great school in the afternoon, and to Germantown to preach in the evening. To-morrow evening, Tuesday, we are to have a Channing Celebration in our church; and he and Dr. Furness, and Mr. May are to hold forth. I have invited Professor Thompson to go with us. It will be fine. . . .

PHILADELPHIA *April* 22, 1880. TO HER HUSBAND.

. . . I must go back to Tuesday evening. We had invited Mrs. Kelley and Florence to come to take tea, and go with us to hear Wm. Henry Channing at Tenth and Locust. And they came. Also Mrs. Biddle came, and asked me to take her. We went early and sat in the fourth pew from the pulpit, in full view of the lovely pulpit decorations. There against the pulpit was the beautiful life-size lithograph of Gambardella's portrait of Channing. . . . In the pulpit stood Dr. Furness, Mr. Longfellow, Mr. May and Mr. Channing, and they all sang the hymns together. Dr. Furness's reminiscences of Dr. Channing were very admirable and in good taste. Mr. Longfellow's prayers, uplifting. Then came Wm. Channing's eloquent outpouring, which held us till eleven o'clock. Discursive, warm, almost Methodist in its warmth, it kept the audience inspired to the close.

. . . In the course of his discourse he told us that he had been visiting the hells of our city, and called on us in the name of the son of God to abolish those houses of infamy—not to let them stand a week. A week! That made me sad. We who look to work a lifetime, only to enter a wedge for their destruction. But many were deeply moved. I had no chance to talk with him afterwards, and tell him what is really doing, and he had no chance to know, for he was not with the right people to tell him; and he remarked to me that he should be so sorry to go back to London, and tell Octavia Hill what a dreadful state of things he found here. And some one at that moment seized him. . . .

PHILADELPHIA, *May* 4, 1880. TO HER HUSBAND.

I have to go to a Seventh Ward meeting this morning, at ten o'clock, and it is now nine o'clock. There is a perfect deadlock between the men and women of our Ward, which troubles me,

* Several years later, I think, one of the pleasantest reviews of my mother's book was written by an Englishwoman.

because it imperils some of the best interests of the society. I was appointed chairman of a committee of four women, to meet the committee of gentlemen on the decision of relief of last Saturday, but I knew it would not amount to a row of pins and it did not.

. . . We were as quiet as lambs, but told them what trouble it made with our visitors to have cases dismissed by them without any consultation with the person having them in charge. They evidently did not see it, made very light of the whole matter, were very complimentary, and we very disgusted and finally adjourned "*sine die*," though we were appointed to meet every Saturday. . . . There will be no comfort to any of us till that Board of Directors is changed. But I did not mean to entertain you with Charity Organization. You get too much of it at home.

. . . Last evening we went to the monthly meeting of the Assembly. It was a most interesting one. Dr. Kellogg . . . made a most stirring and magnificent address on co-operation with existing societies. Professor Thompson followed, with a flood of eloquence, and compared the City of Bruges in modern times, to its former state, and thought much of its declension due to the number and amount of its vast funded charities. . . . If I speak too much of these things, remember you have told me you would be intensely interested yourself, if you were in it. You would. . . .

PHILADELPHIA, *May* 9, 1880. TO HER HUSBAND.

. . . Saturday evening I was summoned to the Central Office to meet the Superintendents of the various Wards. Dear Peter! I know your enthusiasm would have been raised to the highest pitch if you had been there. Three of the Superintendents spoke finely. Then Dr. Hodge made them a noble address, calling on them to make the summer work an educational one. which should tell on next winter's [work]. It was crowded full of invaluable lessons. . . .

PHILADELPHIA, *June* 8, 1880. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . After reading my letters, I had to go to see Mrs. Biddle, and Mrs. Wharton, and Miss Beulah Coates, on Organization business; had to add to my Report and then rest for the evening. At eight, Mary and I went to the Hall. It was half-full. I read my Report, but the impression I wanted to make was turned aside by —— —— afterwards, who killed discussion on it by a

complimentary speech on women and women's work, and dodged every point of importance. I was disappointed that Professor Thompson and Mr. Brinton, who specially requested me to present the question, were absent at the Chicago convention, so I had no one to support me. But these things are to be expected in all such work, and I could not feel the sorrow and indignation that —— and —— did. I knew well enough when I put my shoulder to this wheel, what an eternal patience it would need.

Here is another more detailed account of this meeting in a letter of June 10, from Idlewild:—

Dr. Hodge called for it at the opening of the Assembly that evening. All said, "Don't leave out a word." It was to enjoin more earnest co-operation of the men with the women's work. Dr. Hodge called for it, at the opening of the Assembly and I read it. —— —— directly rose and killed discussion of it by a laudatory speech on woman's work, complimenting Mrs. Leonard of Springfield, and Mrs. Lowell of New York, and the Lord knows whom; whereas it was not what women can do, or *cannot* do, that was the subject, but simply what men and women can effect together. Dr. Hodge stood all the time in hopes to show him he was out of order, but he used up all the time, so that the friends who came prepared to discuss this question of vital importance, had to give it up, and the Country Week was immediately announced. . . .

IDLEWILD, *July* 12, 1880. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . I have been reading Canon Farrar's "St. Paul," with very deep interest. It is a wonderful book, and seems to carry you right back to the time of Paul's life, and makes the whole history full of a living meaning. There are some chapters I shall never forget. Then my friend Anna Jackson presented me with the Life of Dr. Wm. Augustus Muhlenberg, the founder of the St. Luke's Hospital in New York, and of the community of St. Johnland on Long Island. It is a wonderfully interesting life. . . . These books have greatly rested and diverted my mind from the Organization cares, which had been weighing upon me. I put all those aside till autumn. Now and then I have a day of writing. . . . I must answer letters from friends and superintendents of the summer work among the poor,—raise

funds for the summer industrial schools,—encourage the teachers, etc. Or a note comes to me telling me of an unwholesome building in the north part of the City, where the women drop down and faint at their work, because the air is foul and no ventilation possible. I write to the Board of Health, and to gentlemen who will follow up the case. . . . So much red tape, so many notes oftentimes before you can get a wrong righted.

CHAPTER XXXI

Children's Aid Society, Etc.; Eighth Trip to Europe. 1880–1884

After the Charity Organization was fully established and the various wards of the city in working order, many details of administration had still to be arranged, and many problems of a practical kind had still to be solved.

Among the various "cases" which came to the society for help, there were some which did not fall under any of the ordinary classifications of the office. These "special cases" were of a higher type than the vagrant or pauper. They were usually solitary persons, stranded in a great city, without social connections of any kind,—needing friendship and advice rather than any other kind of aid. I do not know exactly how it came about that these unfortunates were assigned to my mother and her friend Mrs. Susan Wharton to attend to, but I suppose it was because they were found to be especially apt at caring for such forlorn creatures. For a number of years they devoted much time to this work, and were able to establish many of their "special cases" among good conditions and with prospects of future well-being. The names of such persons never were placed on the books of the Organization. They were unofficially attended to, and their troubles were known only to my mother and her friend. But they were visited constantly, and their condition was studied with as much care as if it were to be a matter of record. My mother and Mrs. Wharton often had the pleasure of feeling that they had changed the lives of unfortunate persons from darkness to light by relieving their anxieties and placing them in proper and cheerful surroundings.

As the work of the Charity Organization developed and became differentiated into various departments, it was found that the children who came to their notice needed special

care, different from that required in dealing with older people. A "Children's Aid Society" was therefore organized to meet this need. In this society my mother felt the deepest interest, and to its work, for a period, devoted most of her time. Mrs. Charles G. Ames was its first president, and my mother was for a number of years on the board of directors. She used often to say that this work for the children was the cheerful and hopeful part of the whole charitable effort, and that it put heart into the workers, and enabled them to withstand the depressing effects of their necessarily less successful efforts for the older claimants of their help. She used to come home with her face glowing from the meetings of the "Children's Aid," to tell us of their success in getting the children out of the almshouses, of plans for country homes for orphans, of local committees formed all over the State to find and visit such homes, and a hundred details of what was hoped for in the future and of what was being accomplished in the present. The board of this society was a noble body of women; the office which they presently established was presided over by three or four devoted women officials; and the work done there was efficient, wise, and kind.

Out of her work in the "Children's Aid" grew her own more special interest in St. Mary Street, where she established in 1880 a Day Nursery and Kindergarten.

St. Mary Street region was on the edge of the 7th Ward, but not in it. It was a degraded and dangerous district, consisting of a few narrow streets, from which diverged smaller alleys, many of them "blind alleys,"—leading nowhere. It was inhabited by a mixed population of blacks and whites of the lowest type. The few letters of this period which I have copied give but a faint impression of the degradation of the region, but any one who has worked in any city slum can readily fill in the description from imagination.

I have a small volume given me by Mrs. Susan Wharton (my mother's associate in the work of 1880 and the years following), which is called the "History of a Street." It is a collection of short papers, showing all the work done in the St. Mary Street neighborhood from early days, beginning

with a colored mission, founded in 1857, to the James Fortin School in 1898. It is an interesting record of the work of regeneration and reformation wrought in a small but crowded city district during some forty years. From this record it appears that the Day Nursery and Kindergarten, begun in 1880, was but one of several agencies used, although an important one. Of late years the various charitable interests in this district have been combined under what is called "The Starr Centre," at 700 Lombard Street.

The work of St. Mary Street has been participated in by many noble men and women, but I must mention one whose generosity and devotion made possible all the later improvements. This was Theodore Starr, who by rebuilding and remodelling some of the worst spots in this slough of despond enabled his friends and helpers to enter in and accomplish what was accomplished. It was in two of these regenerated tenements that my mother's Day Nursery and Kindergarten found lodgment. The work of buying and rebuilding begun by Mr. Starr was continued by others.

Mr. Starr also purchased a small bit of waste ground beside the Mission Chapel, and transformed it into a tiny park and playground. Miss Anna Hallowell was his aid in this work, and continued to attend to it after his death. In 1900 a whole block in the neighborhood was cleared and turned into a larger park.

The work in St. Mary Street, from the date at which Mr. Starr took it up, seems to have been undertaken in a wise and careful spirit. Those interested in the place were imbued with the ideals of modern philanthropy, and they studied the methods of charity in other places. While they worked with enthusiasm and hope, they were conscious that they must be satisfied with partial success in the present, while making possible better things in the future.

After my mother established the Day Nursery and Kindergarten, they gradually became the nearest to her heart of all her public interests. For twenty years she raised the funds to maintain them. They were most successful. The neighborhood gradually changed its character. From being a place dangerous for strangers to enter at certain hours ex-

cept under the care of a policeman, it became decent and safe. This is an instructive and inspiring example of what intelligent and affectionate interest can do for a neglected and degraded district. A group of the finest of human beings bent their energies to lift out of squalor and distress this wretched population. A few evil tenements remodelled to cleanliness and decency; a quiet place provided where the little neglected children could be cared for; times of meeting with the mothers, not for purposes of almsgiving, but for sympathetic intercourse as between friends,—such were the agencies used, such were the regenerating influences.

When, after twenty years of caring for her Day Nursery, my mother was obliged to lay down this beloved burden, a College Settlement established in a neighboring street took up some of its work and continued its mission.

I find in the little volume mentioned above, "The History of a Street," printed on the first page these words, which I copy, not knowing when or for what occasion my mother wrote them:—

From all this beauty which crowns our lives with loving kindness, has no voice come to us bidding us gird ourselves anew for our life-work, and enjoining on us both the duty and the privilege of converting the benefits we have received to the good of the poor, the weary, the overworked, the sad, the inefficient and the vicious?

Let us join hands to-day in a spirit of fresh resolution, and in the firm faith that love and wisdom combined are the great regenerators of mankind. Shoulder to shoulder, so help us God, we will enter on the work of another year, resolved that we will learn by our past mistakes, be encouraged by our past successes, and steadily go on, seeking for guidance from the Power that holds all nature and the hearts of human beings in the hollow of his hand. SUSAN I. LESLEY.

PHILADELPHIA, *Aug.* 18, 1880. PETER LESLEY TO HIS DAUGHTER MARGARET (in Europe).

. . . All I fear is that your vivacious temperament may suffer reactions of ennui, or else of despondency. Fight against these. Or rather cultivate the jog-trot and commonplace. They will be

your best friends in the long run. Don't think of Oberammergau. It would do you no good. To miss it is no worse than to miss ever seeing the pyramids or the Tajmahal. It is no worse than to have missed hearing Catalani, or seeing John Kean, or to miss ascending Mt. Blanc. There are a thousand fine—finest things, which are not for you and me. But they are for others—and that is just as well. . . .

. . . I am now already, at sixty-one, lonely in the world. Of my familiars, Hodge, Henderson, Whelpley, Jackson, Haldeman, Frazer, McKinley, Towne, are gone; of my elder intimates Agassiz,* Bache, Henry, Rogers, Trumbull, I never see; Winsor, Le Conte and Trautwine alone remain in Philadelphia, Hall in Albany; my Boston friends are far off. Lyell and Tholuck are dead; Ramsay I have not seen for years; Ben Lyman is at the antipodes; Désor alone remains in Europe, and Erdmann, if I could get at him.

How narrow a circle of real near dear friends any one can have! How faithfully we should cherish them!

Some of the young men love me; but what can they know of me? and how soon their lives will diverge from mine!

Sept. 8, 1880. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . The night goeth, the morning cometh—arise, shine, for thy light hath come. What a dolorous life we should lead, were the proportion of obscurity to sunlight increased! How the hearts of men must sink in the far north, as they feel the dark part of the day lengthening more and more until the sun becomes visible only from eight to four, nine to three, ten to two, and finally no day is left. Then however blazes the kind and generous aurora, and when the moon's orbit rides over the sun's, the moon becomes their sun, as a mother assumes the whole care of the children when the father dies. But in darkness and in light, mankind find ways and means for pursuing their useful avocations, and invent enjoyments even out of the matter of discomfort. Then the household flower-pot, and the house dog, and the spinning-wheel, and the pine torch, the care of cows and horses, the telling of ancient legends, the snow ride to church, the wedding festivity, the endless nursing of babies, and above all the lovers' delicious nonsense, make amends for the excitements of public society in more favored lands.

I love to think how the snows of the North provide the weekly

* Agassiz died December 14, 1873. (*Century Encyclopædia.*)

repetitions of the polar current, bracing to man and beast after the blowing of the siroccos and southwest watery trades. And how the enforced house life of the North has in all ages furnished energy, liberty and independence in thought, speech and behavior, in church and state, to the enervated nations of the South, for whom house life, not being a necessity of nature, has ceased to be the essential element of existence.

Yet in the unfree public sociality of southern communities grow those splendid mental vegetations of the world luxuriantly, poetry and art, which in their turn always blow like mighty winds northward, to humanize and civilize the tribes of snow and ice. Civility is of the sun; liberty, of the darkness and forest. Fair exchange of divine commodities! Prolific marriage of sub-tropical and sub-arctic zones!

IDLEWILD, *Sept.* 12, 1880. TO HIS DAUGHTER MARGARET.

. . . My old friend Samuel Haldeman died almost instantly of heart disease. . . .

I linked his name with the thoughts with which I commenced this letter, because when a boy Haldeman waded about his native river bed, in search of snails and shells and pebbles and bugs, things worthless to the world, but of inestimable value to him, which he preserved lovingly, and classified in the end scientifically. Thus he became one of the modern prophets of Divine Science for mankind.

Discipline is the function of early life; and all honest, loving observation and play is a field for discipline. It matters little what becomes of the first-fruits—the after-harvest is sure to be good and abundant. In youth we have leisure. We can repeat a trial a thousand times. But in the busy responsible years which follow, we must cast off our accomplished tasks one after another like models from a mould—if good, well—if bad, we are not permitted to try again, but must bear the loss of our unskilfulness. . . .

JAMAICA PLAIN, *Sept.* 29, 1880. SUSAN I. LESLEY TO HER HUSBAND.

Yesterday I . . . was left at the *Register* Office, where I found Mr. and Mrs. Ames and Charles. I told them the story which Estes told us on Sunday, about Horace Mann meeting Dr. Samuel G. Howe in Boston in the old Anti-slavery days, after he had been spending a long winter in Washington. "Why, Mr. Mann, you seem very much discouraged," said Dr. Howe.

"Yes, I am," said Mr. Mann. "The truth is, Dr. Howe, that I'm in a hurry, and God Almighty isn't." . . .

PHILADELPHIA, *Oct.* 16, 1880. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . I read them Tom Hill's touching article in the *Christian Register* this week, on the death of Benny Peirce, whom we all mourn for. He and Agassiz and Henry and Bache were our four masters. They are now all gone, and we younger ones feel it. Perhaps the younger men will feel our loss likewise, when the time comes. . . .

PHILADELPHIA, *Oct.* 25, 1880. TO HIS DAUGHTER MARGARET.

. . . It is eight o'clock here, and Jupiter and Saturn are in the east. It is midnight there . . . and the lord of the golden and the lord of the leaden house, you would see . . . if you looked out of your window,—shedding their mysterious radiance over the distant Pyrenees.

There was a time, not very long ago, when the Great Nostradamus watched them from the garret windows of the Louvre, and calculated the horoscopes of the nobles and wealthy burghers of Paris, not more than a mile from where you are at this moment peacefully asleep, unaffected by the forgotten superstitions of past credulous ages.

Do you ever think of the movements in their great orbits of the planets of human progress: the planet of religion, the planet of science, the planet of the fine arts, the planet of handicraft, the planet of politics, the planet of domestic and conjugal love, and the planet of philanthropy?

In these are symbolized also the seven ages of man—man the man—and man the race.

Did you ever reflect that what zoölogists say of the evolution of an organic form, is true of that of the individual character? The fœtal man passes through the forms of fish, reptile, bird and beast, before it issues from the womb of his mother as a child of human shape. So also the born man has passed in infancy, childhood and adolescence through the mental and spiritual states of primeval savage and mediæval semi-civilized societies. The reckless, careless, gymnastic, artistic, poetic, superstitious, intolerant, despotic, warlike habits of successive ages and stages of human polity and commerce, are all successively and by turns, and in order, realized by the son and daughter of civilization before manhood and womanhood is reached.

Even reversal to the old types is as true an adventure in the mental and spiritual world as in the physical.

Hold fast what thou hast got and gained and attained to, and await hopefully still the more and better.

I am interrupted; and how lovely was the interruption! The mother's footstep was behind me. How well I knew it! I turned round and there she stood with one hand on the back of my chair, and a timid smile on her angelic face. "How do you like my new bonnet?" It was a beauty, and I said so. Her face lighted up. "Meggie is not here to trim it, and so I had to go to a shop. It is the first time for years. It is brown. John and Sarah Forbes asked me why I always wore black, and begged me to put a little color into my dress; so I got it brown," and she held out the ribbons in front for me to get the light on them. The dear, dear woman!

PHILADELPHIA, *Friday, Oct.* 22, 1880. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . I fear no one has told you about last Sunday evening, and Mr. Ames' Inaugural Sermon.* It was really a rare and beautiful occasion. M. and G. and a few others decorated the desk and platform with exquisite flowers and autumn leaves. . . . G. H. brought in quantities of Virginia Creeper, and the Germantown choir led the congregational singing splendidly and Mr. Heinrich played the organ finely. . . . Dr. Furness made a beautiful prayer and read the Bible very impressively. Mr. Longfellow then made a lovely address, giving the welcome of the Germantown Church to the Spring Gardeners. Then Mr. May followed, with a really heartfelt Right Hand of Fellowship, and then came Mr. Ames's sermon, the grandest I ever heard from him. Father thought the whole thing inexpressibly inspiring and affecting, from its spontaneousness and simplicity. I will write to have a copy of this week's *Register* sent to you that you may see Mr. May's letter about Spring Garden, and Mr. Ellis's little notice of it. Every one did seem so happy! . . .

PHILADELPHIA, *Oct.* 25, 1880. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

[After a description of the inauguration of Spring Garden society, similar to that given in the former letter, she continues:] . . . Tuesday! What a day it was! . . . At ten o'clock, the

* Rev. Charles G. Ames, after editing the *Christian Register* for three years, returned to Philadelphia as pastor of the Spring Garden Society.

Conference of Seventh Ward Visitors, which kept me till one. At four P.M. a great meeting of the whole Organization, to listen to Thomas Hughes of England; and at eight in the evening, the Annual Meeting of the Seventh Ward, at which Anna Hallowell read an excellent report, and Mr. Ames and Dr. Hodge made fine addresses. . . . Yesterday I had to see Dr. C. . . . Dr. G. came while Miss B. C. and I were deep in consultation over manuscripts, and I had to leave. Then I had to visit Theodore Starr for other consultations, raise money to send a sick and worn-out superintendent to Atlantic City for three weeks; . . . all this happily accomplished, I have got home. . . .

PHILADELPHIA, *Nov.* 2, 1880. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . This is the great Election day, which decides our nation's fate for the next four years. You can hardly conceive the excitement of the last four weeks in both parties. There has been nothing like it since Lincoln's election. Father has just gone to the polls, to throw in his vote for Garfield. We shall be in suspense till midnight. Then I am quite sure if Garfield is elected we shall hear shouts from the Lincoln Institute boys, who will be too full of enthusiasm to go to bed until the last word flashes over the wires. It is a beautiful day, not a cloud in the sky. . . .

PHILADELPHIA, *Nov.* 12, 1880. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . My family is large just now, and a good deal of outside work, for this is the month of all the Annual Ward Meetings. I have had to prepare the Annual Report of the Woman's Conference, because the Secretary was disabled, and no one else could do it. Every day of this beautiful season, guests dropping in, or something that must be done consuming time, so that when evening comes, with my heart full of my dear child, I am often too tired to write. So life goes, all so interesting. . . . I wish I could put in a piece of every day. . . .

Yesterday I went out to see Miss Sarah Pugh, whom I had not been to see for more than a year. She is now very feeble, and I know her time here is not long. While I was there, came the news of her dear friend Lucretia Mott's death. She died last evening, and was eighty-eight years old. Her funeral will be on Sunday. . . . She was a very noble woman, and made a real mark on her generation. . . .

PHILADELPHIA, *Nov.* 26, 1880. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

[Tells about her great Thanksgiving dinner.] . . . Hurried home, as General Armstrong, from the Hampton School at Virginia, was to dine with us. He came, and we enjoyed him very much. He gave us a more hopeful view of the future prospects of the South than we can get in any other way. . . . I had to leave the dinner table in the midst of this interesting conversation, to go with Mrs. Wharton to the Twenty-third Ward, which is way out Frankford way. . . .

PHILADELPHIA, *Dec.* 1, 1880. SUSAN I. LESLEY TO HER AUNT CATHERINE ROBBINS.

. . . The whole morning has been consumed in consultations with people who came to see me about the "hells," near the Bedford St. Mission. . . .

I shall call for Mrs. Biddle, to go down there with me on a tour of investigation. . . .

Since then [Thanksgiving] I have been driven with special cases of deep interest in the Organization, which are turned over to Mrs. Wharton and myself, to be managed with the utmost consideration and tact, and never to go onto the Ward books, or be made public in any way. . . .

PHILADELPHIA, *Dec.* 2, 1880. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

[The following is a description of one of the *private cases* turned over by the Organization to Mrs. Wharton's and her care:] She was an intelligent woman, and told us she had been in despair, till she read by accident about the Charity Organization in the Newspapers, and learned that our motto was "Not Alms, but a Friend." Then she took heart, and applied to the Ward Office. We left her, telling her it would take us a week and perhaps longer to investigate her case, and begging her to be of good courage till we came again.

I remember this particular case, and that it was so successfully attended to, that the lonely woman was not only comforted and settled in congenial quarters, but was made to feel herself no longer a solitary creature in the great city, but one of a social circle of friends.

In St. Mary Street, was formed this winter a centre for aid and enlightenment. Mr. Theodore Starr fitted up a room, and eventually a house, for this purpose, and here was established a "Day Nursery," as said before, and here were held meetings to which the women of the neighborhood were invited, to meet those who were especially interested in the work of regenerating this evil spot. In a letter of December, my mother writes of one of these occasions:—

Wednesday 22, . . . in the afternoon took Mrs. Ames and Mrs. Biddle to our meeting with the women in St. Mary's St. They had come in force and brought all their friends. Mrs. Ames talked beautifully to them, and Mrs. Biddle was like a sister to these forlorn women. I was struck with their entire freedom to talk before us, and never one demand made of us. I closed the meeting telling them I would open a Day Nursery in these rooms on the third of January, and that I appointed Cordelia Carlisle, a colored woman, to take charge. I would carry it on for one month as an experiment, . . . then, if they were able, I wanted each who brought children there to pay five cents a day. I talked a little to them, and then we parted, they promising to meet us every Wednesday. . . .

. . . I did not tell you that at Theodore Starr's request I went yesterday afternoon to see his new tenement houses, and took Mrs. Biddle with me. Oh! my dear Meg, had you gone with me last spring to this dreadful quarter, you would see with joy the change Mr. Starr has effected. He rents three rooms to families who have lived for years in *one*, and for the same rent they paid for their wretched quarters. They are living decently now, and improving all the time. Mr. Starr wants Mrs. Biddle and me to visit this quarter regularly, and has given us a room for headquarters, where we may meet these poor women. And we have fixed our first meeting with them on Wednesday. . . . To-morrow Mr. Starr meets us here for consultation.

Monday, Dec. 20, 1880. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . It is early morning, the hour I love to write to you in, for I am not interrupted. The parlor fire is warm and bright, the first gray dawn has disappeared, and some rosy clouds are flitting over the sky, high up above the houses, and in the open

space between us and Spruce St. No sound outside, but now and then a Lincoln boy going to his work, whistling as he goes, or the light step of the early shop-girls as they go past. Dear Clinton St.! I am getting to love it more than any other place, and to feel happy whenever I draw near it, from the distant parts of this great city. Although I have written you twice within the time, I have never felt able to record the doings of the last two weeks. I now see why it is that people who are making history never have any time to record it. This sounds very grand, but I don't mean it so. The foundation of Organized Charity is a great event for the future, poorly as it has yet taken root. I don't expect to live to see it very far advanced, but I know it must go on to solve many problems and prevent many evils. . . . Had I only had time to keep the faintest record of my connection with it from its beginning in this city, the bare facts would have been most interesting to the future workers in this cause. How true it is that "other men labor, and we have entered into their labors"! I think much all the time of dear Aunt Kitty. She will continue to infuse a spirit of peace and love as long as she lives, and that seems to me the highest office of old age. But when I think of all she has been to me all my life, and how, in ways I cannot define, but which I feel and know, all the powers I try to use to-day are really due to her, I mourn that I can do nothing at all to show my feeling; do not even write her a decent letter once in a month. . . .

Dec. 26, 1880. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . I . . . had just time to get to the Women's Conference, where we had a valuable two hours, Mrs. Hardy giving us an excellent account of her work among fallen women in Toronto, and Mrs. Ames speaking finely on the larger interests of the workers.

. . . After lunch Mrs. Biddle called for me, and we proceeded to St. Mary's St. . . . to the very spot which William Henry Channing pronounced last spring "the Mouth of Hell." I won't tell you the fearful sights we saw there. But in the heart of this evil quarter, Theodore Starr has whitewashed and cleaned two little rooms for us, opening together, where every Wednesday afternoon both white and colored women will meet us. The little room soon filled, and Mrs. Biddle wrote down their names and addresses as I gathered them, and then we asked them questions, which they answered freely, as to their occupations, what wages they earned, what rent they paid, etc. The colored women

seemed less degraded than the whites, and were genial and well-mannered, . . . but we had some very strange revelations. How people can spend much time and money over the heathen in foreign countries, I can't see, when there are such awful things in the heart of our large cities. We told the women that we had not come to them to give material assistance of any kind, but we should come there every Wednesday afternoon, and should be glad to have them come and bring their friends. . . .

Of a later day she writes:—

I had to hurry off with Mrs. Biddle to St. Mary's St., where we went from house to house to see our women. Theodore Starr's tenement houses are the wonderful change in that horrid quarter. One by one he is secretly and quietly getting possession of the dreadful places—nailing them up and rebuilding as soon as he can. We saw families who had lived eight, ten and twelve in one small room, all huddled together in unspeakable conditions, and paying six dollars a month for their rent, now occupying three rooms, living room, kitchen and bedroom, with range, hot and cold water and bath-room, all for the same rent they had paid for the one. He has appointed us to see that they do not put more than six in one suite of rooms, and to do our best for their habits and moral improvement. . . .

PHILADELPHIA, *Jan.* 4, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . But I am so tired of the whole thing. Yet, no. I enjoy all the work as it comes along. It is only the planning and willing and uncertainty of the future that wearies me. . . .

And it is a noble work. No ignoble trade is mine; and I shall leave to you a name as an inheritance—a name not unrespected. A name of which you will not be ashamed. And although my work is not of the highest utility, it is nevertheless useful to the Commonwealth. . . .

My mother advised her daughter, who was studying art in Paris, to decide matters for herself without undue regard to the conventional views of life of friends:—

Both you and we have made a great sacrifice in this separation, but we know what we made it for. To defeat the main

object of the sacrifice, because others whom we love and esteem can't see it as we do, would be both a crime and a blunder. If, after mature consideration, you want to join Julien's men's class, join it. . . . You have shown that you could not do it, if you were not sure it would be the very best thing for you. . . . If you go to Julien's men's class, I believe you will do well to wear the very plainest dress, no color about you, keep near your friends, and only remember the dreadful things you have heard of Paris, as warnings to a quiet course that would not be necessary at home. For your own soul's sake, cherish humility which keeps one near to God, the one defence in all trouble. Be not disturbed at anything any one may say of your Father and me on your account. We are too old people to be hurt by that kind of thing, I assure you. We could only be hurt by one of our children doing something *wrong*, and that we know they can't do.

They may make mistakes, but if prompt to rectify them, that can do no real harm to us or to them. . . . Try to *read* a little, if it be only one half-hour in the week of some really good reflective book. . . . Are there no English Libraries in Paris? I have just been reading three chapters,—one on "Kindness,"—one on "Wounded Feelings," and one on "A Taste for Reading," in a book by Faber, called "Thoughts on Great Mysteries," which are splendid and wise. The rest of the book is of no account *to me*. I know you can't have time for reading, but one-half hour in a whole week will sometimes furnish deep food for reflection. . . .

HARRISBURG, *Feb.* 3, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET (in Paris).

[After telling her his confidence in her steadfastness, courage, and wisdom, he continues:] . . . Sorrow will fall upon you, but will not crush you—nor change you. You will not grow bitter and envious of the more fortunate. You will say "my lot is a good one and I will rejoice and be glad in it." You will say "bless the Lord, O my soul, and all that is within me bless and praise his holy name." You will say "though I walk through the valley and shadow of death, thou art with me; thy rod and thy staff shall comfort me."

You will not let moods sway you. You will think, "the ways of the righteous are ordered of the Lord alway."

Long before this reaches you, you will have learned how implicitly we trust in your judgment, and believe that whatever

you resolve upon will be good at least for the time being. Don't let the gossip and gabble of common people cloud your judgment of things. "The fool saith, A lion is in the way." "But the righteous are bold as a lion." "Be ye wise as serpents and harmless as doves," said the Master.

. . . You are surprised at the place I write from. But know that your father is fighting with lions at Ephesus.

Last week, Wednesday, I came here to deliver an address before the Board of Agriculture, in the Hall of the House of Representatives. It was a simple story of what sort of intercourse took place between a geologist and the farmers. I was very much interested in it and so was my audience. But it was a very simple story, and had no science in it. I am rather sick of science. I have been grinding that sort of corn so many, many months! It was good for your Pegasus to spread his wings and take a soar among the clouds. It refreshed his spirit, and reminded him of days by the fountain of the muses.

The next day I met the Committee on Appropriations and had a cross-examination of one and a quarter hours about the survey. Pegasus had his harness on, and was dragging a very heavy subsoil plough. But I caught the Pacific mail train and reached home, . . . what a lovely home! Since then I have been *so* lazy. But Charley sent me a complete set of proofs from my plates of "Man's Origin and Destiny," and that was nice. . . . You don't know how the remembrance of last June comes like the south wind from Orange Groves to my memory.

It is ten o'clock. I might tell you a thousand nothings, . . . how your delicious mother grows like her mother, and sails round, and is magnificent as a steamship freighted with the wealth of the world . . . how lots of lovely women come and go in our parlors, and illustrate the finest features of the XIX. Century; how the miserable bless them, and how all the politics and sciences of men sink into vulgarity in the presence of the work they do.

I must go to bed. One must sleep if one would keep awake.

PHILADELPHIA, *Feb.* 17, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . What a stupid Father I am, to have nothing to say to my beloved!—I am like a sucked orange peel. . . . But I dream of future days when we will walk and ride and read and sketch and write together in out-of-the-way towns of France, as of yore. We shall hunt up together all the undescribed, and, alas! quite undescribable, gems of the Middle Ages. I long to see sheep again—

anywhere, so they be nibbling grass; or cows—or birds—or leaves on trees—or valleyed mountain sides; but only *with you*—not alone—*only* with you. I want to sit and write all the morning knowing that you are painting somewhere—and then to throw down my pen, and go to hunt you up, and carry your box home, and have a nice little *déjeuner* with you—and then a walk—or a ride in the cars—a new little hotel—an adventure with rooms and a Freiburg coffee-house, and a tall Oxford bear with his leader,—or a climb,—or a sermon in the dark in the Pantheon,—or a steamboat ride up the Mosel—or a little opera at Frankfort—or a sketch of a castle wall, as at Baden or Neufchâtel—or an old ruin, like that at Dijon—or the Langres Roman gate—or the Spanish bridge at Tournay—or a stroll through the Lille musée—or music from the balcony at Genoa—or a sail in a little boat out on the Mediterranean!

When shall we sketch a Breton Menhir or an Auvergnese Volcano together? When will you go with me through the Borbonico??? When do you intend to paint M. Gambetta's portrait? . . .

PHILADELPHIA, *Feb.* 25, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Your letters of yesterday sounded a little homesick. Don't be homesick, please. I am grieved at your Julien disappointment. But all will go well in the long run. Strive only for the best. Undertake only what will be permanent and monumental. Don't indulge in art trifles. The ephemeral is for the multitude; let us be of the elect few. It is an election by ourselves of ourselves. She that wills, can. If we construct the conditions, and observe the limitations, we can insure success. And nobody can do that for us. I am pleased to see by your sketches that you have the delicate genius which attempts only the *permanently* beautiful.

. . . But it is not the beautiful only that is to be attempted. The noble, the ideally fine, the *excellent*—that which excels the common run of things,—should be the inspiration and attraction for you. The commonplace, however picturesque in itself, paints itself abundantly all over the world. It is nature's gossip with us human creatures, all day long and every day of our lives. Let us seek for the best conversation now and then—why not always? Why paint a poodle when one can paint a saint or a hero? Why stick to tavern scenes or peasant scenes when one can select from a thousand great crises in human history? Think

how tragedy and comedy of the highest order are combined in the chariot race in the arena. If a peasant must be painted, paint Lepage's Jeanne d'Arc under the apple-tree. Add the divine to the human—the intellectual to the physical—infuse history into the few things you compose. You can only live to paint a few; let those few be all monumental. You cannot begin too soon to lay up sketches on some definite plan,—for some future grand piece of work. Why make a heterogeneous cabinet of odd minerals, plants, shells, arrowheads, Chinese puzzles, and what not—when you can *start* with a large idea, a systematized plan, and gradually build up a classified museum, which will be not merely curious and pretty, but noble and useful. So in painting. Select some drama which you shall paint in the large, ten years hence, as your *chef d'œuvre*. Let every sketch during these ten years be made with this in view, to find its place in it, or to have a bearing on its details. This will be as good practice as if you had no such plan in view. This plan will save you from that vain fruitless distraction which I think is the bog in which artists flounder, sink and are lost,—that heterogeneous, hither and thither, intentionless, planless, hap-hazard, hopeless sort of blind wandering they know not whither, leading really nowhere. If they reach shore or home, they call it rightly *good luck*. It is mere good luck.

Most soldiers fight on, as most artists paint on, hoping that some chance battle will bring them epaulettes. Most of them content their ambition with a corporal's or lieutenant's rank, and never look higher. Napoleon saw the Imperial throne from the beginning, and strove after it from the first. Why should you not keep before you the certainty of painting *greatly, grandly?* It will not prevent your doing everything *well* on the way to your grand canvases. But don't let it be a mere dream, a vague hope. *Plan it! Plan it!* Vow it. Affirm it. Determine it. Don't say, it may perhaps be. Say—it shall be. Say to all small art, Good-bye, I have taken my berth in the fast steamer for the old world of the grand and noble. There I mean to live and build my palace, and plant my park, and found my royalty.

Why should you not hang an immortal canvas on the walls of the Cathedral in Philadelphia, or of the Corcoran Gallery in Washington. I should prefer the first, because high art is for low people; the multitude should always have the best; the rich always have more than their share; feed the lambs, and the sheep will browse well enough of themselves. . . .

PHILADELPHIA, *March* 29, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Yesterday I wrote a number of pages on Benevolence to insert in XIV. Lecture on Man's Origin and Destiny. But I am not living on a high enough plane now to write as I should. I cannot summon divine thoughts at pleasure. The commonplace is in the ascendant. Indeed I begin to dread to see what I have written in permanent print. The word that goeth forth, is like an arrow shot, that returneth not to the bow-string. Beware of letting the *détenus* of the soul escape; you know not what their conduct will be. . . .

I too feel that an Angelus represented worthily by two peasant girls, stopped in their daily task, is as *noble* as an Angelus represented by that altar-piece at Bruges (or Ghent?) in which four great throngs, on four sides of the throne, worship the Lamb,—or any other still larger canvas, describing the spiritual adoration of the highest. I am wholly at one with you in feeling that the sublimest sentiments can be conveyed through the channels of our mortal occupations. If to live well in every calling is the best and the most beautiful subject of contemplation, then to paint it well is the best and most beautiful art. For after all, a painting —a poem—a sermon are of one nature. In each of these three forms of expression one soul cries unto another soul—I have found the Lord—come with me, I go to serve and love and worship and be with him forever. . . .

My father disliked the "Art for Art's Sake" assumption, and was no advocate of the Impressionist School, as these letters show:—

PHILADELPHIA, *May* 10, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . I brought the Vandyke* down first and pinned it against the curtain between the rooms. The gas-light from under the Mercy's Dream fell on it. You have caught the spirit of the scene. The light is concentrated in the little Christ. You have given the effect of the dark rocks above, and the dark robes of the man and woman to the right. The noses *are* all too long. But they are probably so in the original; for the old Dutch couple are anything but handsome. The angels are far in the back-

* A small copy which my sister had made of the Vandyke Holy Family in the Louvre.

ground. If your penciling was finer, the picture would be all I could desire. But I shall never be content with you until you do more than realize an idea. An idea realizes itself by assuming precise shape, form, body, outline, detail. To sketch an idea—to suggest an idea—is not to realize it. A ghost suggests a man or an angel, but does not embody one. Haziness, suggestiveness, is the effort of laziness or impatience or incompetency to shirk their responsibility for bad work. No one has a clear thought until he has put it into precise expression. He may by a word, phrase, gesture, suggest the possible existence of such a thought to himself or another person—but the thought comes into existence in the bodily form of some perfect and complete train of words grammatically and logically following and grouping themselves. So the beauties of nature, and of history in nature, have only a partial and unsatisfactory existence until they are represented in all the details of their parts and relationships. An undetailed picture is neither one thing nor the other:—it is not a sketch, or memorandum: —and it is not a perfect *re*-production or *re-presentment*—representation. The thing, scene, action, does not *present itself again*, but it sends a servant who somewhat resembles it as its proxy. . . .

. . . Your Vandyke is pinned up at the window against the left-hand glass of Mary's bookcase in the front parlor, and is much admired. *I* like it more and more. You know all *my* criticisms come tumbling over each other like a kennel of dogs at the first approach of a stranger. *Afterwards* they are quiet and good-natured enough.

I have been drilled by life to impulsive judgments at first sight. All men of affairs, who are obliged to turn from one thing to another, and judge rapidly and decide quickly and act at once, acquire this habit of quick criticism even towards what they do not properly understand.

. . . I feel sure that you are born to be a good portrait painter, and I cannot tell you how proud I shall be; for I look upon that as the highest branch of your art. To see soul, is greater than to see form of flesh or color. To represent character, is the last achievement of genius, whether with pen or pencil.

The nobility of the human species so outranks all the other noble things of nature, that its true appreciation and representation become tests of nobility in the spectator and artist. The action of a dramatic scene (composition) is fugitive and occasional, stands alone as a historic item, and need not correspond to the real and permanent in the actors. But the *eternal unity* of the

person stamped upon the face, is a sort of grand summation of a thousand events. . . .

PHILADELPHIA, *June* 13, 1881. PETER LESLEY TO HIS DAUGHTERS [in Europe together].

. . . By the by, my Margaret, do you remember our discovery last summer of a fresco, I think among those on the triforium wall of St. Germain des Prés, Christ child on the shore, with a pontiff behind—which I told you was the subject of my lost Murillo of the Louvre? I have waited since 1844 for an explanation of the picture, and got it in this sermon.

Athanasius, bishop of Alexandria, was about to write his great book on the Trinity. He wandered meditating along the seaside. He found a little child with a shell scooping a hole in the sand and filling it with water from the sea. Then said the child to the pontiff, O Athanasius, as easily as I can pour all the water of the sea into this hole in the sand with this shell in my hand, wilt thou find it to resolve in thy mind the infinite mystery upon which thou art meditating. And so saying, glory surrounded the head of the child, who was Christ, and he vanished away. . . .

IDLEWILD, *Aug.* 25, 1881. SUSAN I. LESLEY TO HER DAUGHTERS.

. . . My body has rested well this summer, and my mind too a good deal, but not entirely. It is impossible for me to have charge of the number of private cases I now have, and not have a good deal of anxiety at times. . . .

PHILADELPHIA, *Aug.* 19, 1881. PETER LESLEY TO HIS DAUGHTERS.

. . . I read your European politics with intense interest. You probably know nothing about it. That is natural enough. But if you were as old as I, you would be speculating gravely on the probable consequences of the death of William or Bismarck, or Gladstone;—on the next move of Gambetta;—on the result in Algeria, etc., etc. When 500,000 people move bag and baggage, every year, from Europe to America, it means something. The number is not (comparatively) great; but the movement is very significant; and the reflex action upon those left at home must become ever greater and greater. Every emigrant becomes a habitual telegrapher of free ideas eastward. Five hundred thousand immigrants means 5,000,000 letters per annum.

. . . A letter from Rev. G. F. Wright has just arrived, saying that he goes to Oberlin, and that he and H. C. Lewis have traced the terminal moraine across the state most successfully. There were two great glaciers, one coming from the N.W. and one coming from the N.E. and meeting at Salamanca (S.). This supplies the missing link in the long line which has now been traced from Cape Cod, via Naushon, Block Island, Long Island, Amboy, Belvidere, Salamanca, through Ohio, Indiana, Illinois, Wisconsin, Iowa, Minnesota far up into Western Canada, 2000 miles. . . .

PHILADELPHIA, *Sept.* 1, 1881. PETER LESLEY TO HIS WIFE.

. . . Coming in [from Idlewild] I read "Nature," and found, in Thompson's African Lakes, the long-sought clue to my theory of the vacillation of level in closed coal basins. Just as I accidentally found in last night's telegraph an extract from the London *Times* describing the late wonderful discoveries at Thebes, of the coffins and bodies of Amosis, Thotmes I., Thotmes III., Rameses I., Rameses II., Penemha, and their queens and babies! . . .

PHILADELPHIA, *Sept.* 10, 1881. TO HIS WIFE.

. . . Tell Mrs. Forbes that Mr. Lewis has just come in to show me his *completed* map of the great terminal moraine, and all he has to say about it is of the highest interest. It is curious that what her Naushon house is built upon, rides over the highest mountains of Pennsylvania 2000–2500 feet above tide.

Sept. 11, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

[On knowing that her sister has left her, and returned home from Europe.] . . . Cultivate your old friends and companions. Replace for the time and of necessity the absorbing love you nourish for Mary with as lively and active love for others as you can cultivate. This is the true distraction. Remember the meaning of the word—dis-traction, from *trahere*, to draw—a drawing away; a dragging of one's self away from the place of danger,—from circumstances of *malaise*—from any malign or despotic influence—from whatever threatens peace or virtue or health.

How often the human soul wakes up only to find itself like Gulliver in Lilliput, fettered to the ground by thousands of delicate bonds, any one of which is no stronger than a hair, but all combined are too strong to be broken by our utmost strength. How often this discovery comes too late! How often despair follows futile efforts to break loose! But had Gulliver not slept

too soundly, his little tyrants would never have had their chance to make him a fast prisoner. So eternal vigilance is the price of liberty. Keep thy soul, as the sentinels on the wall keep the city from surprise. Beware of the insidious entrance of first one and then another enemy, who will open the gates from within and let in a host, who will be too powerful to eject. . . .

NAUSHON, *Sept.* 13, 1881. MOTHER TO HER DAUGHTER MARGARET.

. . . We made a very happy party, and dear Cousin John looking out of his kind eyes at all of us. O Meggie! he is a rare man, long may he live the centre of this lovely circle.

O Meggie dear! it is so perfect here—and I have such a holiday feel, such a sense of absolute rest as I get nowhere else. This morning when I rose, it was five o'clock—the sheep were all over the grass and among the rocks—rooks were cawing, and little wood robins were singing sweetly and tenderly. There were the rosy tints in the sky of early sunrise, and the breezy hush one only feels on an island, far from the mainland. . . .

Sept. 25, 1881. PETER LESLEY TO HIS WIFE.

I . . . took the car to Spring Garden; walked out to Broad St.; found the Hall packed full, all except the last two benches; and listened breathlessly to the most perfectly *expressed* and delivered sermon on the great event of the day [death of Garfield] that man or angel could have devised. My admiration for this wonderful preacher rose to the highest pitch. Simplicity itself, perfect diction, artistic arrangement, telling narrative, persuasive suggestion, lightning-like flashes of exhortation, a vein of subdued pathos, and behind all an immensity of reserved force, unexpressed, but plainly present. But its characteristic was straightforward fairness, reasonableness and matter of fact practicality. . . . It was a noble audience; mostly young, but a large sprinkling of gray heads; and so breathlessly they hung on Ames' lips. And no wonder. I suspect that such preaching cannot be heard to-day in Boston, New York or Philadelphia; to say nothing of other places. In fact it reaches the very highest ideal of preaching. I can't give you any idea of my satisfaction in it; and you know I am a very severe critic, pardoning no fault in preaching, be it large or be it small.

Surely this man is destined to extend a most benign influence upon a part of our population.

Oct. 22, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Last Friday I read to a pretty large Philosophical Society meeting my "Notes on a possible Adite element in the most ancient history of Egypt," and they seemed to be interested in the subject: certainly, I was, if they were not.

We elected Prime Minister Gladstone a member. Will he not be proud! My dear Society has its ludicrous aspect, like most old people, places and things. How wide do you estimate the interval to be, Meggy dear,—as an artist, now—or, as a young philosopheress, if you prefer,—between the quaint and the ludicrous? I wonder what basis for calculation we should adopt. . . . Another question: Can a gargoyle be beautiful? Again, Is such an opera as "Patience" a product of the fine arts? . . . From such queries I turn to inquire what will be the upshot of the new Irish rebellion? Will Mr. Gladstone be able to checkmate Mr. Parnell? To all appearance there is no real fight in the Irish people, and consequently landlordism is safe for another term of years, if not forever.

It is now Monday morning, and I have a heap of work to shovel away from the doorstep of the week. . . .

Nov. 2, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Don't be lifted and dashed alternately by what happens from day to day, or from week to week. Regard the whole—not the parts—of your life,—and of any long work. Success and defeat are always intermingled in all human affairs—like as, in a journey,—in mountain climbing—in the construction of character—in every scientific investigation. So it must be in art. Forget your defeats as fast as they occur, and remember only your successes; just as a man should forget his enemies if he have any, and remember only his friends.

About my book:—Before this reaches you, two copies of it will have got into your hand sent by Mary, one for Arnold Bost. I have seen but one criticism of it (by Prof. Winchell) and that was kind. Perhaps nobody will notice it. So much the better. There are too many books in the world. No. There is not too much wheat. And books are the corn out of which human souls take their spiritual bread. I can hardly expect that many—or few—will read it and be more than pleased, or stimulated a little. But so the artist of the brush must also say about that other kind of heart grain,—pictures. Still, all good things are of *some* use to somebody. And the abundance which reduces the value of

each book, or each picture, is after all the very chief thing to call out our gratitude to the bountiful provider of such an abundance, for the crowds that hunger and sigh to be satisfied. . . .

Nov. 17, 1881. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Oh, there are so many books I wish to write; and so many that I do *not* wish to write, but *must*. This MUST is our great MASTER. But it is a good angel in disguise, forbidding us only what will harm and hinder the full career of life and fair development of character. Read what I have printed on Page 303 of "Man's Origin," if you wish to know my fixed sentiments respecting the *entente cordiale* between a man and his fate. . . .

EIGHTH TRIP TO EUROPE. WINTER OF 1881–1882.

My father sailed for Europe December 1, 1881, to join his daughter Margaret in Paris. Eighteen months of constant work and heavy responsibility had left him tried, but not ill. The continuance of the survey was insured for two more years, and with it the well-being of his corps of young assistants. He was happy in the power to follow out the lines of geological research already far advanced. The anxiety at the end of every two years, lest his work should be stopped and his corps of workers dispersed, made these periods hard to get through, but he was always boyishly light-hearted when the suspense was over.

He started off, therefore, for this holiday in the best of spirits, taking with him sufficient work to relieve his conscience from the self-condemnation of laziness, which was usually a drawback to his complete happiness in such absences from home. In Paris he settled down in the quiet little hotel in the Rue St. Hyacinthe, St. Honoré, and thoroughly enjoyed the unhampered and uninterrupted chance to work or play at such hours and seasons as best suited his mood. I give a few extracts from this happy winter's correspondence. The adventures of this season are recorded also in a little volume which my father published later, entitled "Paul Dreyfuss." It began as a story telling

the adventure of a father and daughter in Paris, really a record of his own experiences of this winter. As it went on, however, it became more a discussion of the French politics of the day, and the "story" ran up a tree, so to speak. The little volume is full of life, and, although as a story formless, I think many persons would enjoy its lifelike descriptions of Paris as it seemed to one who was working there.

At home, however, we were rather reluctant to receive these "Pauline" letters instead of the usual more personal family letters, and it was clearly not possible that we should have both.

PARIS, *Dec.* 19, 1881.

. . . At the entrance of the Avenue St. Germain we left the river and rode straight through the heart of the old aristocratic city, and descended at the bureau opposite St. Germain des Prés. They were singing the last of the psalms before the Sermon. A woman insisted on leading us up to chairs directly under the pulpit. The preacher soon occupied it, and the congregation in front of us rose and reversed their seats so as to face us.

Science hostile to religion, but religion not hostile to Science, was the preacher's thesis; and he developed it with such insistency and trembling energy that I could not help thinking that I recognized the aged face and sonorous voice of my old friend the Abbé Moigno, the editor of "Cosmos," whom I learned to know first in 1844, and then had that curious talk with, in 1863, about naphthaline lights, when he showed me his machine in the little laboratory, against the north wall of the Church, now destroyed, with all the other such tumble-down attachments, facing the new Avenue. . . .

The music after the sermon was most delightful. A full orchestra of voices occupied the choir, and first a superb trio, and afterwards a long anthem in the minor key, infinitely tender and pathetic, were among the moving incidents of the service. There was a noble baritone and a sweet and strong tenor. The church was crowded, but Meg said that half the people went to sleep during the sermon, and she described to me in an amusing manner the struggles of a poor nun to keep awake, feeling the bright young foreign heretic's earnest eyes to be upon her,—eyes as thoughtfully wide awake as her own poor little peepers were ennuied and oppressed with leaden lids.

Dec. 21, 1881.

Now—to-day—yon are reading the first long prosy section of the adventures of Paul Dreyfuss. What do you think, my love? Just now I picked up the *République Française* of this morning, and on the second page saw the announcement of the splendid civil marriage in the presence of 2500 people, friends, all Jews!!! The benediction being bestowed by the Grand Rabbin M. Isidore (St. Isidore!) in the "Temple Israelite de la Rue Victoire,"—the *témoins* of the bride being M. Challomel-La Cour, Ambassador at London, and M. Henner, "painter"; and those of the bridegroom, M. Léon Gambetta and M. J. Casimir-Périer—of M^lle^. Alice Porges with—whom?—ye Gods and little fishes! —with M. Ferdinand Dreyfuss!

I never knew there was such a patronymic before. The coincidence is alarming. Haven't I put my foot in it?—in fact my *three* feet. I wonder if my Paul is any relative of this distinguished M. Ferdinand, at whose wedding no doubt all the rank and all the wealth of Western Europe were represented yesterday. Well, I can't help it now; and to think that I have already mailed to you 88 closely written pages of Paul's adventures, and am now just about to continue the elaboration of the 100th page which Meg's irruption into my room three hours ago interrupted. I have got him safe through England, and in fact to the Prince Albert, and he is now just examining Meg's room in minute detail. To-morrow I shall probably induct him into Paris life, and leave him there to recount the rest of his adventures himself, while I commence my shamefully neglected geological description of Perry county.

Damn Perry county!

But in good sooth I had a good excuse, for I could not write in that dark back room. But now at this front room window, I have lost all excuse, and must begin my odious task.

Dec. 27, 1881.

Nelly's picture of Meg is delightfully *spirituelle*. Felix has not brought us his finished portrait of her; but, while it is beautifully painted, and a good likeness, it is the creation of a boy who sees no deeper than the outward casing of the soul.

So the Egyptians modelled the face of their dead on the cover of the coffin. And so Haeckel and Volk paint the fair face of that Nature which Oken glorifies by evoking and then portraying its soul, the inherent deity.

I live in expectation of a newer Oken, to arise before I die,

—the "Second Israel" of science. Appear, thou prophet of the Lord! Arise, Shine; for thy time is come, O daughter of Zion! —thou New Jerusalem—O holy science of the Future!

Were I seated a little higher, I could see thee in the distance; as, if my window were but twenty feet more raised above the street, I could look over these roofs, ragged with smoking chimney-pots, and see Montmartre, and the Madeleine, St. Vincent de Paul and Notre Dame de Lorette, the Bourse and the Bibliothèque, and the Semicircle of Paris from the Arc de l'Étoile all round to the Gare du Nord and the Temple.

Happy the few who can take their lodgings in a tower like the fair mystic of Hawthorne in "The Marble Faun"! They must live alone; but the world is spread before them, and the sky surrounds them, and the shadow of no wall hides from them the sun and moon and stars, by day or night.

The comfortable traveller cannot see the city for the houses; the botanist cannot see the forest for the trees; the historian cannot see the course of human affairs because it is so crowded with courts and armies; the philosopher cannot see the Universe of which he prates for the forms which swarm like insects before his eyes; the saint cannot see his God for the dense mist of his own and his fellow-creatures' spiritual passions and affections.—We are all like army ants travelling between the roots of grass over the prairie of life, and nothing breaks the monotony of microscopic ignorance but when some bolder and more curious ant climbs to the upper leaflets of a weed, and descends to report that he has beheld the Universe.

. . . Tell Cornelia that my blood boiled at the insult she received from the unjust judge. The brutality of a criminal lawyer is only a little more disgusting than the tucked-up sleeves of a pork butcher; but the legal degeneration of the spirit of a judge, like the fatty degeneration of the human kidneys, threatens the brain of society with a worse poison than that of uric acid. If American Justice has this moral Bright's disease, the case is fatal. But remember this: there are always judges—and judges.

Jan. 12, 1882.

We have just returned from our first evening visit . . . to the Cranches'. . . . Mr. Cranch's hair and beard are snow-white. He and his wife worship Carrie and her work. She has great talent and showed us superb portraits, studies and copies which she has made.

Jan. 13, 1882.

. . . I shall see Laugel, and arrange for visits to the Geological and Geographical Societies; find out what they did at Bologna; correspond with Reneviers at Lausanne; get Désor to prepare us rooms for one week at Nice, and—meanwhile—resume my morning and noon walks with Meg to her studio Panorama.

Jan. 19, '82.

What a reckless dog I am to be talking so coolly of Nice and Venice! Here I have been in Paris, or away from home 50 days! and have done no honest work of any kind; have been fluttering my painted wings like any other brainless butterfly; sipping nectar; making love; drifting on the breeze; balancing on flowers; and still I talk of fluttering further yet; a thousand miles further from my work at home!

I do not recognize my identity. I have no plans. Time has ceased to be an element in my calculations. I hate the thought of responsibility. I abominate geology. I long to turn Artist and forget science; to bury myself among these young enthusiasts,—and have my paint brushes and canvases, my easel here and my easel there, my *concours*, my composition, my Academy, my Fortuny box, and my own little studio hung with sketches and bits of tapestry.

My letters have given you not the faintest conception of my enjoyments. M. tells me that I have grown quite young again, and I think that she is right about it. In fact I am no older than I was when I first stepped foot in Paris in 1844. I feel like one of the antique vases of the Louvre, into which the experiences of 36 years have been poured, without changing the material, the form, the color of the vase at all. My brain is as clear as a bell; sometimes it tolls, and sometimes it booms, and sometimes it rings merrily, but is no longer muffled. The windows of the belfry are all open to the sky.

I wish some angel—my guardian spirit, *par exemple*—would advertise me what may be my duty. I have almost forgotten what that word *duty* means. Have I any duties? Two months ago I was oppressed by them; where are they flown to?

Feb. 30, 1882. To his daughter Mary.

Your letter about "Lohengrin" and Freetraders has been amusing me at breakfast; and I laughed to see how our views and feelings run like two trains, side by side, on parallel tracks. In my opinion the Wagner musical school is another exhibition of

the Wilde æsthetic fashion, and of the Whistler impressionist painting. In my opinion these three furores and a fourth—Ritualism—are merely phases of a natural reaction of one part of cultivated Society against the exclusive realism of the other part:—pictures of peasants,—novels like Thackeray's,—explanations of the creation like Haeckel's,—railroads up the Nile Valley, metal assays of the beams of the sun,—statistical reductions of the percentages of crimes,—substitutions of Rothschild for Rochefoucauld, and Renan for Thomas à Kempis,—and all that sort of thing. When prigs and pedants multiply, you will find also springing up to scorn them and flout them, here and there, in every walk of life, some "Francesca di Rimini, miminy pimminy, je-ne-sais-quoi young man." And Wagner is one of these—*me judice.*

The distinction of producers and consumers is one hard to hold on to. Producers—work-people—are the heaviest consumers, (1) because there are more of them, and (2) because they not only eat bread and drink wine, but consume wood, iron, gold, coal, everything, in their work. On the other hand, consumers, even if they do no work, furnish a constant stimulus to productions, and are in that sense producers.

But, apart from the gross material fact that some people do not *make* anything to add to the wealth of human existence, a large number of those very "lazy folks" are occupied in keeping alive "blue blood" and beauty, and grace, and sentiment, and amusement in the world. You may carry out *that* train of ideas yourself at your leisure. It is a streak of gravel which has gold enough in it to pay to pan. . . .

But I never alluded, in my letters, to your theory of the four kinds of money, viz., that there was a proportionate equation to be made out of the money of bank paper and the money of broker's exchange,—the amount of acual force and the amount of reserved possible force behind it. I am afraid that you are misled by the *form* of the equation. I confess, however, that no topic of inquiry is more difficult than Money. I wish I had heard Prof. Thompson and I could then write less timidly. . . .

Wall Philadelphia in, so as to confine its population of workers, and their machinery, from all contact and intercourse with the rest of the world.

Now put all the money and all the credit of the world into Philadelphia, and ask it to do its best, in the way of increasing production. You see that only a small part of that money and credit could be made available. The rest would be idle, useless,

without the power to stimulate. Only *so much* would stimulate as corresponded to the number of mouths to be fed, the number of hands to feed the mouths, the number of passions to be gratified, and the number of people who could minister to that gratification.

The whole of Christendom (including part of India, China, and Japan) is in this condition. It is walled in, and can only use a certain amount of money (in any shape) because its number of mouths and hands is limited.

The rest of the world still uses cattle money. As fast as it gets "civilized," it forces the sum total of gold money and credit money to increase.

NICE, *Feb.* 5, 1882.

We saw dear Désor this morning in a lovely large sunny room. But he looked shockingly old and sick, and a handkerchief hid one eye.

We shall go to see him to-morrow again. He talks English with hesitation now. He inquired if I could get him information about the mean of the thermometer on heights in America. They are still trying to explain the Foehn, and have established stations along the Maritime Alps. Ruling passion strong in death.

PHILADELPHIA, *May* 19, 1882. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . It has seemed to me that dear Mr. Emerson's death, bringing before me so fully my lifelong debt to his noble mind and his rare instructions,—that this fact and dear E. C.'s engagement together, have filled my heart with an abiding uplifting. . . .

My life from birth to twenty-five was very precious to remember, but since then has been "the bright consummate flower." May it be so with you. We just learn how to live by that time, know ourselves a little, lay aside the burdens, and take on our wings for patient, upward, sustained flight. Life grows deeper, but yet easier, we know ourselves for children of God, for whom he has provided whole armies of ministers—stores of sunshine, depths of rest. Only let us be willing to take these, and appropriate them as they come to us, and it will be well with us forever. . . .

BRUSH HILL, *Aug.* 6, 1882. SUSAN I. LESLEY TO HER HUSBAND.

. . . I took up Froude's life of Carlyle, . . . and directly became deeply absorbed in it, and have remained so for many

hours. You have often noted my love of biography, and interest in personal history. I wish I could give you an idea how I feel about this one. I don't care the least what any one says about it. It is borne in upon my mind that such *absolutely* honest and truthful portrait painting as Froude has done in his life of Carlyle, is going to raise Biography to be the power it never has been yet, as an influence on human character. All the morning I have been reading *with you*, and talking over fine letters or passages. . . .

In September his daughter, having returned from Europe in March with him, went back to Paris for another season of art study. He writes to her of his grief over her departure, saying, "My heart was as heavy as lead," but adds:—

You know how little I ever expect in the future; but I have learned by long life experience that a patient continuance in well-doing yields a result fairly exchangeable for hope. I am afraid however that even in heaven I shall be as great a fool as the deacon whose halo wouldn't fit worth a damn.

In June, 1883, his oldest daughter was married to the son of his dear friend, Charles G. Ames, and the young couple went West to live. Many of the letters after this date are to the "Western Children."

PHILADELPHIA, *July* 23, 1883. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Wright's memoir on the Moraine across Ohio, in the *Silliman's Journal* (*American Journal of Science and Art*) last number, is occupying my earnest and delighted attention. He makes the extreme south nose of the ice sheet cover Cincinnati and fifty miles of the Ohio River Valley. I think this ice dam, backing the waters up into Pennsylvania high above Pittsburg, is going to afford us the long-waited-for solution of our terrace question. I said in one of my prefaces a few years ago that the only difficulty in our way was the want of a dam in the Southwest. . . .

July 24, 1883. PETER LESLEY TO HIS WIFE.

. . . This is a wonderful world, is it not? It is not all a muddle, as poor Stephen used to say to his Rachael. In spite of

its "black countries," and "Roman legions," and Zulus, and cholera epidemics, and pauperisms, and superstitions, it is still a divinely good world—because it is pervaded with those virtues and affections which keep its skin white and its blood red, like the healthy humors of a human body.

But it is a wonderful world, at which I wonder more and more the older I grow. One would expect to get used to the wonder; but I do not, and never will. I wonder especially at its inequalities, which made Stephen call it a muddle. Some people call them injustices; but they are nothing but accidental inequalities—wonderfully accidental—but evidently not caused by any ill-will to anybody.

You and I, for instance, and our children, have eaten nothing but white bread all our lives. Other married people (rich and poor) never taste white bread; all their diet is sour and dirty. But certainly this difference is an accident of circumstances.

God is very good in furnishing such immense quantities of the raw material of happiness to his human creatures, and his unhuman creatures too; but this good God is evidently no respecter of persons, and hands out the loaves and fishes to the just and to the unjust indiscriminately, that they all may feed.

In August, 1883, my father went West to visit his children, and to attend the meeting of the American Association for the Advancement of Science.

PHILADELPHIA, *Sept.* 14, 1883. PETER LESLEY TO HIS WIFE.

. . . I feel as if I had been all the year building a row of houses, and had finished them all, and let all of them but one, and have seen a good tenant for that one also. In a few days I will have worked off *my whole stock* of current duties. Such a thing has not happened for ten years. . . .

Oct. 22, 1883. PETER LESLEY TO HIS DAUGHTER MARY.

. . . Communication between St. Paul and Philadelphia seems to be slow and tedious. I allow eight days for a reply. . . .

Your mother quotes to me the old black woman's advice, "Trust in the Lord, Honey! He's tedious, but he's sure."

My recent County hand atlas maps are very pretty—two of them, Centre and Clearfield, wait for D'Invilliers and Chance to finish field work. The upper end of Cambria also. Somerset I have yet to do, and it will be a difficult task; as I must

follow the indications in the report (H 3) and interpret as I best can from my old knowledge of the region, where Hodge and I camped in 1839,—forty-four years ago—think of that! Think of printing in from memory old camping-grounds after forty-four years! "What an entertaining thing a mind is!" . . .

My occupations this fall and winter will be confined to seeing Lesquereux's text through press—P, Vol. 2.

Also Billin's report; also Lewis's Moraine report, then D'Invilliers' Centre Co. Also Chance's Clearfield Co., Delaware Co. comes first; White's Huntingdon will be delayed until spring. Wall's Monongahela will be in my hands in January.

You see I will have my hands full—with seven books—to say nothing of writing Berks, Part 2—and incidentals. . . .

PHILADELPHIA, *Nov.* 5, 1883. PETER LESLEY TO HIS DAUGHTER MARY.

. . . Your letter just arrived. . . . Meg sat reading it by the window after breakfast, your dear Mother on the sofa, Nelly at the other end of the table—all of them like hounds in leash, ready to dash off each one on her own course. Busy is no word for the folks in this house.

Your birthday was celebrated with anecdotes and joy. I sent you no present, because I think of you all days and hours of the year alike. I should as soon remember to send the sun or moon a birthday present, or a rain-cloud, or God.

I am in the midst of the MS. pp. of my quarterly report to the Board to be held next Thursday; and back of them on my table lie piles of MS. pp. of Delaware Co. report—a pile of Mr. Harden's photographs of Kaolin quarries, etc., etc.

To-day is election day. Good-bye. . . .

HOME, *Dec.* 16, 1883. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I have been drawing a topographical poem all the last week, and never enjoyed anything better. I alternate drawing and writing, to rest and refresh myself. But I can only work five or six hours a day, and as for writing what is not obligatory I actually *cannot do it*. . . .

PHILADELPHIA, *Oct.* 8, 1883. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I had fully resolved before my return, that I would resign from the Children's Aid, and give my small strength to

only two things this winter—namely, Spring Garden and St. Mary's St. But surely you would have said this was no time to resign. The Treasury was empty, the work of the office nearly doubled, we are in debt a few hundred dollars, the work never more successful—more family homes wanting children than we have them to supply. At this juncture a law has passed obliging the Guardians of the Poor to take all the children out of the Almshouses. To-morrow a great convention of all the Guardians throughout the state is to meet here at the Council Chamber, at Fifth and Chestnut, and our Society is invited to be present and make a bid for the children, along with all the principal institutions. Now Mrs. Biddle and I had no question about the duty of going before the Convention, and asking for the children, and then going to work to establish a good financial basis later, especially as we should have from the Guardians exactly what they paid for the children in Almshouses—which, though it would not be enough for our purposes, we thought could be supplemented. Miss Meredith also was with us warmly, and Philip Garrett and Dr. Cadwalader said we were going through exactly what every new enterprise must encounter, and that the presentation of our work before this Convention would go far to help us financially as well. Mrs. Ames was not hard to win over, although much disheartened by the debt; but the Quakers one and all seemed to think there was nothing for us but to give up the ship.—*We* couldn't when we thought of the poor little children, and the six hundred we had already provided with good and happy homes. We parted Friday morning, adjourning till this morning, when we were to meet again, to decide whether we should go before the Convention to-morrow. "I also have not been idle." I spent the rest of that day and Saturday writing careful representations of our work to several moneyed men, and asking if they would each give us five hundred dollars as the basis of a fund. Saturday night came one answer from Mr. H. C. Lea, with a promise of five hundred; no other answers as yet. Yesterday, Sunday, I went to the dear church, our own Spring Garden, and heard my brother Charles preach a noble sermon on the Crucifixion.

. . . And afterwards went to see Mr. I. V. Williamson at his Office in Bank St., an immensely wealthy man whom Philip Garrett wanted me to see. I did not find him in, so sat down in his private office to write him a letter. But before I had got down the first page, he appeared. As briefly as I could, I stated the case of the Children's Aid, told him that Mr. H. C. Lea

had promised me five hundred dollars if I could find four other gentlemen to do the same. He was a gentle, sweet old Quaker, and listened to me very attentively when I set forth the superiority of family homes for the children of the State, over Institutions, always of course under the careful supervision of our local Committees and visitors. Yes! he said, but children are sometimes abused in families. Yes! said I, in rare instances. But if such a thing happened, a neighborhood would ring with it, and one child in one family would be easily and speedily removed by the Local Committee. But if an abuse occurs in an Institution, no one can ferret it out, it is considered an insult to a Board of Managers. He really seemed moved by this argument. I only stayed fifteen minutes, then rose to go and handed him our Report, my own little explanation of the work, and took leave. He promised to examine carefully, and then said, "If I decide to do anything, you shall hear from me, not otherwise." And so I thanked him and came away. Too tired to read, I dropped on my sofa, and dozed till lunch at one o'clock. Then Mrs. Biddle called for me, and we went to the State House, finding Mr. and Mrs. Ames, Mr. and Mrs. Gawthrop, Mrs. Wharton, Mrs. Blankenburg, Dr. Child and Cornelia [Hancock], Dr. Wayland and Philip Garrett, and Dr. Cadwalader, all in their places. It was a long and interesting afternoon, listening to the Reports of the Guardians from every county in the state; and Mrs. Ames put in excellent remarks about Outdoor Relief. But it was too full an afternoon for our Children's Aid to come up, so we all have to go to-morrow at nine o'clock, and sit the morning. . . .

PHILADELPHIA, *Oct.* 27, 1883. SUSAN I. LESLEY TO HER DAUGHTER MARY.

[After a meeting at the church.] . . . My Fanny Ames found me, and begged me not to take my tea at the Church parlor, but come home with her to high tea with Mr. May and Mr. Clifford, Mr. Slicer and Brooke Herford. So we quietly scooted off, Mr. Ames soon following us, and what a a good time we had, to be sure, over that tea table, the five men and Fanny B. talking most charmingly! After tea, we all proceeded to Spring Garden, found the Church full, music heavenly, and everything as delightful as possible. Dr. Furness was already in the pulpit and read the scriptures. Then Brooke Herford gave us a wonderful sermon on the Place of Authority and Revelation in religion. . . .

But, oh, I can't tell you anything about it. It was enough

to me to look in my brother Charles's face, and feel how we were both enjoying it together.

Now, dear, 'tis 'most my bedtime. I have been working very hard the last two weeks; we all have, I in my way, Fanny Ames in hers, for Children's Aid. Her address at the Convention of Poor Directors was above all praise. Then at our meeting with a Committee of the Guardians, she was equally fine. The result was, we were permitted to organize Auxiliary Committees in all Counties of the State, and to take all the Children from Blockley [Almshouse], except the Catholics and Jews, who are to be handed over to St. Joseph's Asylum and the Hebrew Society. I send you one of our Appeals, over which Dr. Cadwalader and Mr. Ames, and your father, each spent an entire evening, and boiled down to this. Meantime I have been back and forth, to see and talk and persuade and obtain the five signatures at the end; and also to McCalla and Staveley's [printers] to get one thousand copies; then I have been culling lists and addressing envelopes—hunting up a good and experienced collector, and stuffing him with answers to every question he may be asked, trying to get all well started before the end of October, as the gentlemen tell me 'tis the best time of all the year to get money out of business men. Then, oh, then, such pulling of the blessed wires, as Charles would say, such sessions with Dr. Cadwalader, etc., etc.; letters to and from Philip Garrett, the kindest encouragement from George L. Harrison and Henry C. Lea. And, oh, how I have neglected you my child, and dear Aunt Kitty and all!

Mary dear, don't ever get into public work till you are sixty. It is too absorbing, and takes one far too much from the cares and joys of earlier married life. I look back, and thank God for the many years of comparative solitude and almost exclusive home life. The little good I have ever accomplished in these later years, is all the outgrowth of years of silent reflection and gathered thought . . .

PHILADELPHIA, *Nov.* 4, 1883. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Monday evening came the Assembly, which was devoted to consideration of the Children's Aid. Mrs. Ames made an excellent address, your father read a long and striking letter I had received from Mr. Fairchild of the State Charities Aid of New York, with regard to placing out children. There were discussions, and a humorous little speech from Dr. Wayland, and then we came home. I was very busy all of Monday and Tuesday

with Children's Aid Work, and hunting a collector. Wednesday, a meeting of our Board of Children's Aid. I had written a report as chairman of the Committee on Reorganization, to meet the new demands from the State. But, Brother Charles kindly tinkered it into better form and shape for presentation. In it, our Committee recommend the clothing our President, Mrs. Fanny B. Ames, with discretionary power to form Auxiliary Committees, when and where she pleased, to visit the children already placed, etc. To Mrs. Gawthrop, Chairman of the Office Committee, we recommended power to reorganize the Office, to direct the methods of work, etc.; and both ladies were to have the largest liberty, and expenses paid. Our recommendations were for six months only, a tentative, experimental plan. All approved, and the two ladies accepted. I had had long sessions with both, and a weight was lifted from my mind. A collector also appeared to-day, whom I engaged and started on his course. I don't yet know of his success; I hope he will turn up soon, but before he began, I had myself got $1150.00 in eight days. Of this the Baldwin Locomotive Works gave $500.00. . . .

PHILADELPHIA, *Feb.* 28, 1884. SUSAN I. LESLEY TO HER SON-IN-LAW CHARLES.

Lately I have been deeply exercised about the matter of the Union of the Charity Organization and Children's Aid Society, which is warmly advocated by your Father and Mother, Dr. Cadwalader, Miss Meredith and Cornelia Hancock, and much sympathized with by several other wise and good friends. My sympathies are with them, my judgment against them, and after thinking for weeks about it with the best light I could get, I was forced to ask for postponement which has probably killed it, because I had no conviction enabling me to decide. There were five in favor of the Union, six against, and my voting at all made the majority. How I wanted to stay away! But I could do no otherwise.

I think it was during this winter that my mother took much interest in the work of one of her friends, Miss Cornelia Hancock, who was superintendent of the 6th Ward, where she invented and carried out certain methods of local work more fully than was accomplished, at that time, in the other wards. The headquarters of the 6th Ward became both a refuge and a work-room for the needy of the neigh-

borhood, under the immediate supervision of Miss Hancock. It is many years since she was occupied in that particular work, but she has accomplished much good in other departments of charity work, and is still an active participant in the interests of the city poor.

Jan. 24, 1884. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Father is working very hard this week, but is very chipper and enjoys it . . . This morning . . . he said some things I thought you and Charles would have enjoyed so much. I cannot quite pick up his forcible and beautiful expressions, . . . but it was like this. He said if one wanted to secure the happiness of a soul, one must put it into happy relations with its work, that ever so much depended on providing various resources to a child, and then tenderly watching its own choice of occupations, and when you have discovered his or her bent, facilitate its doing what it wants. Then it will love work, and the habit will be formed. Much later he thinks should come the demand that it should do distasteful and disagreeable things. First of all, he said, make the instinct strong, through making it in love with work, and no fear that it will not compass drudgery later. . . .

PHILADELPHIA, *March* 2, 1884. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . It is Communion Sunday to-day and I love to be at that service, from long and sweet association—though it is no longer a necessity to me. . . . And while I don't feel it a need for others, I love it for what it has done for me. But it is only one of many influences, and there are others that are even more powerful and sacred. So I have never asked or expected that others should feel as I do about it. Religious reverence is fed from other sources for the young of to-day. So they have the reverence, it does not matter from what source it comes. . . .

April 6, 1884. PETER LESLEY TO HIS SON AND DAUGHTER C. AND M.

. . . I have been very happy the last few days; not only because I am just about quite cured of my Parisian grippe (which has been very bad for a month past), but chiefly because I suddenly came to a conclusion with my *bête noire* of a Moraine Report,—a perfect nightmare, lasting six months, from which I have awaked. I send its Index to Harrisburg to-morrow.

The moment I got through with it I rattled off three long delayed pieces of work, and expressed them to their respective places. To-day I have made good headway with the Berks Co. map, which has been staring me in the face since February 1st. In a day or two that will be sent off. Then I tackle the deserted remnants of Delaware County; and then—well, I shall begin to print d'Invilliers' 400 pages, Claypole's 800, and White's 600—1800 pages MSS. to read proof of, preface and index, besides all the illustrations to lick into shape, before August.

. . . I compose lots of epistles to you; as many to St. Paul as St. Paul ever sent to other places. I wonder if the few we have in S. S. are the only ones he ever mailed. What do you think? If so, he must have either found it very hard to write—as hard as if he were a State Geologist—or else found the Roman P.O.—in a bad way. Just think of his having to wait months or years before finding an available opportunity. Cicero sent a slave and a letter to his wife every day. But I wouldn't exchange one of St. Paul's for the whole collection of Cicero's. And what a different pedestal their respective immortalities stand on! Paul's on spirit, Cicero's on style. Paul's are as good in one language as in another; Cicero's are worthless in any language but Latin, and not worth much in that to any but Oxford Dons. Paul's grow brighter and sweeter from age to age; Cicero's were always sour and murky, and I predict will be mere curiosities in time, while Paul's will be milk for babes and meat for strong men, to the end of time.

My Mary, this is God's Friday as they called it in the olden centuries when they first learned that the man who was crucified at Golgotha was only apparently a man—was in fact the ruler of the Universe, who had been walking about a few hundred square miles of one of the smaller planets, of one of the smaller suns, of one of the stellar systems, of his universe, for a good many years eating doura bread, and talking with some of his creatures in a serious, pitiful, helpful way, until they became angry with his moods of seeing things, and they murdered him, and then after lingering around a few friends a few weeks, he went back to his throne of the universe.

Is it not strange that all Christendom should weep and groan every year at this late time, for the anguish of a man, which only lasted a few hours, and was not worse to bear than what has come to millions of other men and women?

This question has profoundly affected thinkers, whether they were philosophers of the schools, or whether they were

common people who had gone through a great deal of common human touble.

To meet this question, theological priestcraft has put forth all its powers. So that the Good Friday sermon now (and for a long time past) states that when God suffers, the suffering must be infinitely greater than anything a creature can experience:—that the particular suffering in this case was an exquisite compound of all possible sufferings in one;—that the sufferer not only bore divine wrath, but the woes of divine wrath which each and all of the human race before him and after him ought to bear;—that each human being must weep on this memorable Friday—this Commemorative Friday—for the fact that he and she gave his or her individual stab to swell the sum total of Christ's wounds.

My Mary will not suppose that any covert satire is in these lines. No—my girl—I look with awe upon God's world and its operations—of which this is one. But I bless God that your mind was early balanced to weigh at their just value the inventions of theological logic—inventions applied in good faith (often at least) to the service of the bewildered ignorance of the multitude. And I must confesss that I rejoice that idolatrous and shameful orgies of the oriental "weeping for Thaumus" and "lament for Adonis" got at length such a respectable substitute as Good Friday. We ought to be equally grateful for the change of the Roman Saturnalia into Christmas.

But it is none the less needful for us to keep our spirits untarnished by superstition. While we can love and in one sense adore Jesus, that need not imply our acceptance of the absurd dogmas of Infinite wrath, on the substitute, Universal ill desert for Adam's fall, churches in black, music banished, ashes on the head and woe in the heart, for what has passed and gone 1800 years, and for one who sits smiling and serene in heavenly places to-day, perhaps wondering what all this means. . . .

PHILADELPHIA, *April* 30, 1884. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I have had some things to try me in the Children's Aid, but I won't take the time to tell you, till we meet. But last evening I had to go to a Trustees' Meeting at Spring Garden, and when it was over we adjourned to the church parlor to listen to Dr. Keen's lecture to the Fortnightly, on the Circulation of the Blood, illustrated with casts and models.

I had been so harassed for days, that I had not been able

to change the current of my perplexing thoughts. But this fine lecture of Dr. Keen's lifted me quite out of my ruts, and into another atmosphere. I never heard anything grander than his description of the mechanism and action of the Heart. I wish I could repeat it to you. Though he made no comment or analogy himself, I am sure the one thought that must have forced itself on every reflecting mind, must have been, "Intelligence is behind this divine mechanism; no hap-hazard combination of forces produced all this." Involuntarily too came to me the words, "Your heart shall live forever," though those were spoken with another meaning. And then came over me a great peace. "Our little systems have their day; They have their day and cease to be: They are but broken lights of Thee, And thou, O Lord, art more than they."

Children's Aid troubles melted away before the vast proportions of the divine government and guidance, and they will not return in force. . . .

CHAPTER XXXII

Trip to England. 1884

In the summer of 1884 my father took a short trip to England with his youngest daughter. During his absence his first grandchild was born, to whom he refers in several of the letters.

Philadelphia, *June* 15, 1884. Peter Lesley to his Wife.

. . . My heart is in a perpetual flutter, as if it were a girl's instead of an old man's. But the very thought of breaking prison has taken off ten years from my age. . . . For our task is not done. We have a family of grandchildren to rear. That will be a brave recreation.

So you did not care much for the great oratorio? I am glad of it in one respect. You never care for any but the very best. That is fine. Why should we pretend to be enchanted with any but rare enchantments? After Jenny Lind—well, let those who never heard *her* be delighted with something less heavenly. And let those who never heard the real divine church music, take all the happiness they can out of Thomas's grandiose imitations. But give me in preference the enthusiastic singing of old hymns by an old-fashioned church full of worshippers.

I wonder if we shall really have celestial music after we leave these bodies in the grave. But when the peace of eternity is won, surely the company of the blessed will be a perfect substitute for the finest music. What I wish a heavenly life for, is to be set free from responsible toil,—to recover the elastic freedom of my spiritual faculties, to converse with the best and wisest spirits of all ages—and especially with those magnates, rulers and directors of the universe in whose beneficent existence I firmly believe,—and with Him, whom to think of as gracious and near, shadows the soul with a reverent and delightful emotion. Oh that Thou would'st speak with me as a man! Then would I

answer Thee. Where hidest Thou thy glorious presence from such as ardently desire to behold thine excellency? . . .

[SHIP LETTER], *June* 25, 1884.

. . . Dr. McCosh held out his hand, and apologized for not making my acquaintance sooner, as he had but just learned that I was a Professor. (Wasn't that a funny thought?) I said, yes, I belonged to the faculty of the University of Pennsylvania and if that wasn't an honor, it was at least a guarantee for integrity. But that I was an apostate Presbyterian, and therefore could lay no claim to the honor of his acquaintance. He cocked his old bent head round, and looked up at me, with a quick, "You will come back, you will come back." I thought of what Bishop Potter had said to me while we were waiting for the train on the Blairsville Station platform, that exciting day when Bob Jackson and I kept back the negro mob from lynching the U.S. Deputy Marshals, who tried to get the runaway slave. "Oh, Mr. Lesley, you will be a good Episcopalian before you die!" How little these great men know of us little ones! Or is this the stereotyped ecclesiastical formula for addressing a hopeless subject, who can't be dismissed to eternal punishment with an anathema maranatha? . . .

BRIDGENORTH, ENGLAND, *July* 5, 1884. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I find it as hard to write to you as to an angel in heaven; because you seem to me translated and transformed into the Dresden Madonna,—and how can a common mortal address a pen-and-ink epistle to the Dresden Madonna? On your arm, at your breast, I see the little new Jesus, to you the first born son of God, with his little cupid's bow mouth and serious blue eyes, and tiny sea-shell ears. Mouth, eyes and ears, the three avenues of approach for the Divine grace, and of the issue of human virtue. Grace and peace be with thee. . . .

A hush comes over the noisy universe whenever I think of you,—and the light rustling of angels' wings, and suppressed music, and a bright light shines in the west. All that is common, vulgar and unclean vanishes away,—nothing remains but the perfect, true and beautiful. What is time? What is age? when all things can thus in an hour be made new and the world begun again.

LONDON, *July* 12, 1884. PETER LESLEY TO HIS WIFE.

. . . I had resolved to see Octavia Hill for your sake, if I saw nothing and nobody else in London. But my resolution was in vain. She was "engaged." Friday from four to six they receive. I sent in a message and my card, and was ushered first into the basement parlor where two young ladies were, . . . a charming room, and a pair charmingly suggestive. Then I was led upstairs into the most beautiful large and homeish parlor you ever saw—twice as large as ours, and twice as beautiful and homish. Such a wee little woman came in, about as tall as my waist-band, and a very little deaf, with a sweet motherly . . . serious countenance—and met me in the most sincerely cordial manner; excusing her daughters as being really and truly engaged.

LONDON, *July* 12, 1884.

[Calls on Trübner] . . . who was very enthusiastic about American Science and Art. Here I got addresses to Tyndall, Bonney, Ramsay, Woodward, Geikie—and I was fortunate in finding Geikie in the same sanctum where I last saw Murchison and Graham. He was exceedingly cordial, and I gave him a copy of the last Atlas AA, and the moraine book Z. He remembered his visit to me in Philadelphia, even better than I did myself.

He told me that Ramsay had gone the previous evening to Wales, that Tyndall was at the Royal Institution, and Woodward at S. Kensington, and Bonney at Hampstead. . . .

LONDON, *July* 13, 1884.

[Went to Mr. Conway's chapel.] . . . Moncure Conway's lecture on Gnosticism, the old and the new, surprised me with its force, its balance, its gravity, its profound spirituality. I was not prepared for all this. It held me spell-bound. All the learning of my life seemed to pass in review before me. Much of the arrangement of ideas—historic and philosophical—seemed new to me. He has evidently passed ahead of me, and accomplished generalizations of a noble sort of which I have not been capable. I found it a happy fate that had led me to London to listen to him, in this lordly discourse. It not only disclaimed, but somewhat contemptuously refuted Agnosticism. It was eminently Christian, lovable and invigorating. I am astonished that he can leave London to resettle in Virginia, but not at all surprised that his people worship him and feel orphaned by his departure.

. . . And we had a most delightful day (with the Conways) in the Queen Anne Village of one hundred and fifty families, so quiet, and clean, and rural, and beautiful; an ideal home for thinkers. . . .

LONDON, *July* 14, 1884.

. . . And unto us a child is born. And it is within the range of possibilities that he shall rule a mightier nation, and be a greater Pharaoh than this obeliskal greatest of all the Egyptian Pharaohs was.*

I read on the obelisk over and over again repeated the divine epithet RA SI, child of the sun. Horus, lord of both lands.

At the foot of this monument 3000 years old I finished the grandmother's letter. Happy grandmother! Happier boy to have such a grandmother. Happier mother to have such a mother! Happiest mother to have the baby boy on her bosom, and whisper to it RA SI KA—Thou duckling of the Sun! My little Horus! My rising sun! My Hormaxu, Eaglet of the horizon! Orb of light, between the two hills—the past and the future! My Ramenxeper—perpetual creator of sunshine! My Neb Tiu, lord of both lands—thy father's life and thy mother's life! . . . Such will be the cooing of Mary over her baby; I can hear the cooing from afar here. . . .

My father and sister went north from London, by way of Lincoln, Peterborough, and Durham, to Edinburgh. While in London, he had had pleasant meetings with a few scientific friends. He lunched with Professor Tyndall, and spent some hours with Dr. Woodward, among his collections in the Natural History Museum at South Kensington. At the end of this journal of his trip he writes:—

And this ends my narrative, which I trust you will leave with my Mary, as a sort of heirloom for her baby boy, which he may be glad enough to read sixty-five years hence, in the year of our blessed Lord 1949—say 1950 to make it an even number, *i.e.*, in the middle point of the next century. Who knows but that England and Scotland may be two small outlying provinces of the United States?

* A letter telling of the birth of the first grandchild was read by my father as he sat on the Thames Embankment at the foot of the "Obelisk of Thotmosis," and the scene is reflected in his meditations on the event.

HOME, *Aug.* 30, 1884. PETER LESLEY TO HIS WIFE.

. . . I had a good useful morning at the Library: . . . after dinner Ashburner sat with me an hour coaching me up in the preparations for the meeting,* and especially the excursion to the anthracite country on Saturday. The Geologists and their wives and daughters will go on that. . . .

It seems that after I take the chair Thursday morning, Gov. Pattison and Mayor Smith are to make speeches of welcome to the Association for the State and for the City.

Thursday evening Professor Newberry is to lecture on the formation of the American continent. Friday evening, before the reception, John Welsh and Dr. Pepper are to make speeches of welcome to foreign societies and European guests. Monday evening there is to be a biological reception at the Academy Natural Sciences and Tuesday P.M. a lawn party at Haverford College. . . .

. . . I am still hard at reading Whitney and Wadsworth's Azoic attack on Logan and Hunt. They are strong fellows, but Samson pulled the temple down upon his own head; and their prejudices in favor of the eruptive nature of gneiss and against all crystalline sedimentation seem to me as incomprehensible as the various absurdities which they rally so unmercifully.

MILTON, *Sept.* 8, 1884. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . I am so glad that —— is lovely to you, for I could not bear to think of anything else, with all your cares. I could never do anything with a queer disposition, till I *loved* the possessor of it and had studied its sources. If I find the person has a *heart*, I have the strongest hopes of what steady and unfailing patience and affection may do, to improve them. If he or she is deficient, in heart, all the patience and all the love in the world will effect little. Better for such a soul to come under the discipline of a forceful and not too considerate a nature. . . .

PHILADELPHIA, *Sept.* 11, 1884. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . A most successful meeting it has been, a brilliant meeting, a harmonicon and melodium of a meeting, and everybody says so. The arrangements were laboriously and skilfully made,

* American Association for the Advancement of Science. My father was president at this meeting.

and the citizens came up to the support in a most creditable style. There has been no fuss and no feathers, nothing tawdry, no noise, confusion, or crossing purposes,—little or no guzzling, no toadyism, and scarcely an ounce of padding in the list of papers. Either there is a real large advance in the quality of our National Science, and in the numbers of respectable men of science (damn "Scientists")—or there was extraordinary critical courage exercised in [the] Standing Committee, or rather before the papers reached discussion there. . . . .

PHILADELPHIA, *Sept.* 28, 1884. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . I finished my third township map; I have seventeen in all to do; but Mr. Harden will help me after a while. At four o'clock I tried on my new fine black cloth suit and white waistcoat, and went to the League and played billiards until ten minutes of six, and then went to 1420 Walnut Street, and was received with effusion by Mr. and Mrs. Tatham, James and Cadwalader Biddle, and a lot of nephews and nieces. Then Sir Wm. and Lady Thomson* came in, and soon we were (twelve of us) seated at dinner, in the great upstairs back room, with a smaller room back of that, and a square veranda overlooking the garden back of that, which they enclose with double glass sashes in winter time. The house is a fine specimen of the grand Philadelphia home house.

The dinner was simple and easy, and the conversation took that safe middle road which neither ennuied nor overstimulated anybody. I confess I enjoyed it hugely. After dinner some of us took a smoke in the veranda, and the boys seemed to cling to me as if I were an oracle, and could answer the most important questions. Of course I thought them nice boys. Mr. Tatham reminded me that I was his very oldest living acquaintance, since he used to sit in the Billingtons' pew in the old Second Church (Third and Arch), near my father's.

. . . Sir William is a small, thin, lame old man, and Lady Thomson a tall, sweet-faced, strong-willed, ladylike woman. They are evidently well paired and love each other. Both of them are wide-awake and on the *qui vive* for every new American fact—popular or otherwise. A rather intense curiosity character-

* Sir William Thomson (first Lord Kelvin), celebrated British mathematician and physicist. Born in Belfast, Ireland, June, 1824. Professor of natural philosophy in Glasgow University since 1846. (*Century Cyclopedia.*)

izes their intercourse with folks; and an evident love of accuracy in statement. They have a Scotch dread of an American statement of fact or opinion—*comprenez?*

PHILADELPHIA, *Oct.* 16, 1884. SUSAN I. LESLEY TO HER SON-IN-LAW CHARLES.

. . . We are having peaceful, happy times, your Father Peter and I, he busy all day, and we both sitting over the wood fire the hour before dinner with no other light than the firelight, when the Clinton St. parlor looks lovely, though the young faces are not here. But I think the rooms retain the old flavor of those times when many young forms flitted about here, and we never feel lonely as long as we can bear each other company.

. . . Politics have afforded us a little diversion the last two days. Father Peter is glad over Ohio, for which I suppose Cousin John and James Freeman Clarke would be indignant—but Edward Hale and John G. Whittier would sympathize. I post to you to-day two Newspapers, *Press*, containing Edward Hale's Letters and Address, both good statements of the best Republican standpoint. My Peter says the Independents seem to him like this. "We are living in the Seventh Ward, lots of bad men in it. So we will move out of it, and live in the Fourth Ward!!!"

My parents were ardently Republican, and did not approve of the "Mugwump" movement, of which many of their best friends and relatives were a part.

BROOKLYN, *Nov.* 9, 1884. SUSAN I. LESLEY TO HER HUSBAND.

. . . Here I find the families all divided. . . . E. did not vote at all, but is convinced of Blaine's corruption. You hear the two sides equally pronounced, and none of them seem to me to go deep enough. But I recall Emerson's fine sentence at the close of "The Fortunes of the Republic," that the ship of State is under the direction of the Divine Helmsman, who will not let her drift,—and I trust to the self-rectifying power of the common people. . . .

BROOKLYN, *Nov.* 10, 1884. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I felt troubled at certain aspects of the Election the last week, which seem to me ominous. The recrimination and

accusations of fraud from both sides seem bad enough, but the want of confidence in public men and measures it inspires in those who have no means of distinguishing true cries from false ones in the dust and confusion—seems to me one of its worst consequences.—And the best and most trustworthy are so divided in opinion! I am like your father an optimist when I cover ages and cycles with my outlook, but I confess the present aspect does not seem encouraging. . . .

PHILADELPHIA, *Nov.* 20, 1884. SUSAN I. LESLEY TO HER SON-IN-LAW CHARLES.

. . . Father Peter has just been reading aloud to me the enclosed, which he thinks noble and true. And he has asked me to send it to you and ask you to read it thoughtfully. Perhaps you will read it to Mary. It contains facts that ought not to be forgotten, but which naturally are not burnt into the memories of the young, as into ours who lived a lifetime before the war and after.

On Monday all the way from Pittsburg your father Peter had the company of a fine young man who was a former student in the University. He had just come from the South, and said he had travelled from Richmond through South Carolina, just after the Election, in the company of a Judge of the Elections, who told him with the greatest glee that there were 6000 colored Republican votes in his district, and that he "*fixed*" them—he sent in returns of 2000. "That's what we do down there," he said boastfully, "and it's what we mean to do always."

But the Lord reigns; the Great Helmsman Emerson speaks of in "The Fortunes of the Republic," is behind all events, and we must wait with patience to have all eyes opened, and to see the good that comes sooner or later in spite of evil. . . .

PHILADELPHIA, *Dec.* 7, 1884. PETER LESLEY TO HIS DAUGHTER MARY.

. . . Your letter was like the clear sky—nothing in it—but adorable for hue and tone. It is the best of times when news fails. . . . At our end of the telephone, there are gossipings enough.—I wish I could jot them down, or get them through a tube to you; but the labor of writing about trifles is too much for me; I am now quite incapable of anything less weighty than No. XII., or the Mahoning Sandstone on Broad Top, revise-proof of which I read last evening in the midst of the roaring of a storm, which might almost have sufficed to complete the

erosion of Pennsylvania. The city streets look pretty clean this morning, and the sunshine is perfect; I never saw a more spotless sky; it must feel very dry; it looks as if its mind were preoccupied with the problem—where to get stuff to make another cloud—for its baby Earth.

. . . Your . . . Mother has concluded to get well: . . . she has not yet left her room, but she devours novels and Apollinaris water, and everything she can find in the newspapers and magazines in praise of Mr. Blaine, and derogatory to the false and foolish Republicans who have plunged the country into a chaos of danger, and set back the hand on the sun-dial of the south a good many years. I mean the *shadow*, not the hand. But I might straighten up the metaphor by saying—and smashed over to the left the gnomon, etc., for that is what our ridiculous "reformers" have just done. . . . A year or so ago these same meddlesome matties put the Democratic party in power in Pennsylvania; and the consequence was that a whole session and extra session of State Legislature was spent in a wrangle over a plan for readjusting the districts, after the census, and according to the constitution, in view of the next election. The Democrats refused to permit a readjustment—the election was held according to the old apportionment—our incoming legislature is unconstitutional—our future United States Senator will have no right to his seat in Congress—etc., etc.

"Young men think old men fools; old men *know* young men to be so."

But there were a lot of old enough fools in this last fracas, mixed in, here and there, with the crowd of young ones. Enthusiasm is a fine phenomenon; but it is well both for the enthusiast and for the bystanders to have the origin of the Ivora certified to, before the exhibition is permitted to go on.

Your Uncle Joseph (who spends his winters in the south) described to us the "Eight ballot box law" which I never before understood. The southern whites say that they had to devise it to protect themselves from black rule. Each candidate has a separate ballot box, and no ticket is counted which gets into a wrong box. The blacks, unable to read, always get their votes into wrong boxes. They all cast Republican ballots, and yet the Democratic candidates always are elected. The blacks can't understand it, and so they are gradually giving up the business of voting as a bad job. This is the trick all over the South, wherever the shot-gun cannot be used; or wherever the feelings of the whites are too kindly for violence.

Now, the Attorney General U.S. and the Postmaster General U.S. will be southern ex-slaveholders and confederate ex-officers, and politics will be perfectly "easy." . . . Thanks to the ex-abolitionist "reformers," who were not wise enough to let well enough alone.

The lesson of the day is this:—

We Americans have become over-educated in the technique of organized association. We have lost much of the traditional wisdom which teaches that reforms are effected by personal missionary work,—that goodness, in all its aspects, is a *leaven*,—is propagated from man to man, from woman to woman, through society. We have come to believe, on the contrary, that if a few cunning organizers shall get together, make a caucus, call a convention, select a candidate for high office, issue a program or platform, and then howl at all standing arrangements—there must result a sudden revolution and change of things—favorable of course to some idea in vogue.

Republicanism has in this way become synonymous with chronic revolution. But the word revolution being still in bad odor, we never use it in carrying out *our own* purposes,—we say "Reform." But it means revolution all the same.

Now what a nation needs is not at all "Reforms"—but a perpetual *fermentation* of good yeast—the yeast of goodness—every kind of goodness.

A man like F—— is accustomed to *command.* Of course he goes in for Revolution (Reform), that is, for *compelling* goodness in society by *power from above*—by changing rulers.

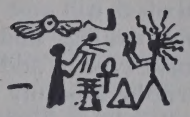
A man like C— is accustomed to *dictate.* Of course he goes in for the *ex cathedra—ex officio—ex imperio* method, also. He will even consent to a doubtful character being made governor, on the mere chance of thereby effecting a violent revolution (Reform) in some one direction which he fancies and pets,—and at the awful risk of introducing a score of unforeseen disturbing agencies.

A man like C. or S. eaten up with ambition, or making bread by notoriety, of course goes in for the violent external, instead of the quiet, unseen fermentation.

. . . There are lots of things I wish to talk over with Charles and you, . . . especially a wonderfully fine book by T. Lloyd Stanley, called "Outline of the Future Religion of the World."

As for the Babykin—the Scion—the Burgeon—the future Berserker—the coming hero of unimaginable adventures in a world not yet constructed—but constructing—self-constructing—

I can only say—Kiss his eyes and his nose and all his ten fingers and all his ten toes—for—



PHILADELPHIA, *Jan.* 11, 1885. PETER LESLEY TO HIS DAUGHTER MARY.

. . . Although perpetually haunted with the desire to write to you, . . . I feel a strange repugnance to it when I make the effort . . .

Yet my old heart yearns and burns. . . .

Now, my love, I do not intend to make my words turn out in line and toe the mark, and trim, and shoulder arms, and march at even distance. I have altogether too vast a quantity of that drill sergeant work every day of the week. What is essay writing or reporting but drilling that "awkward squad," the vocabulary? And yet, if it was *only* that! But that is nothing to the training of facts in the barrack yard of Science. How *very* awkward they are! How they *will* put the left leg foremost, or the butt of the gun where the muzzle ought to go! What a deal of swearing they occasion before they are presentable in a public review, or serviceable in a serious battle! In fact, and in consequence, most people's words, facts, ideas, yes, and sentiments, are only to be compared with the militia volunteers in London *Punch*.

Twenty days ago, Bien and Co. began sending me proofs of the last of my little county maps, and I had to turn to and color the little State map, which is a skeleton key to unlock all the various locks of the sixty-seven cells in that penitentiary of knowledge. I made it, and sent it. Then I had to write a geological preface to the little atlas, a concise description of the structure of the state—a sort of detailed forlorn hope, carefully picked from our entire army, for dangerous special service,—against the legislature. When that was sent to the printer at Harrisburg, an experiment had to be tried. I began with A Adams, A Alleghany, A Armstrong, B Beaver, etc., etc., and wrote a two or three or four page description of each in turn—as it were, sending out a stronger force to support the forlorn hope in the attack. Only seven battalions as yet have marched,—sixty more are waiting orders. Everything looks prosperous, and I

am pleased to see that others are pleased with my method and manner. So far, so good.

But at the rate of three per day and two pages apiece, the sixty counties to be described will cost *me* thirty days of hard, very hard, thinking and writing, and the *compositors* about twenty more pages of small type to add to my preface.

But the little book will be a beauty and make a sensation.

Whether or not it will help or hinder our appropriation bill —who knows? We ask for $90,000 for two years.

But the Governor has attacked the Survey in his message, with a protest against—not our field work—but the vast publication of our reports. . . .

The Governor tells us privately that he is entirely a friend of the Survey—but he has worded his message so as to make everybody believe that he opposes it and calls for an investigation. This we dread, because of the delay it will occasion. Two years ago the Investigation of 1883 did us great good, and no harm, because Senator Coxe pushed the Committee work along and got out the report in time to have our bill run its regular course. But that good luck could hardly happen twice. Perhaps, however, the ill odor of the Democratic Governor will prevent the Republican Legislature from taking any notice of the recommendations in his message, some of which are very just and proper, and this of an investigation into the cost of our printing is one of such. . . .

HOME, *March* 1, 1885. PETER LESLEY TO HIS DAUGHTER MARY.

. . . And it really sometimes happens that the sun of hope breaks with a gleam or two through the dull sky of incessant routine-work, and my old health leaps within me—as if from a long lethargy, to its feet,—and I hear a strain of far-off, very sweet and sometimes very noble music, as if approaching,—as if something very enchanting was about to happen—some festival to commence—some new era of the Ideal were about to take the place of the Prosaic,—a limited and particular, but altogether perfect Millennium of spiritual peace and plenty. Much the same as if I had made a tour around the globe and was approaching Home. And truly, Mary dear, I have made this tour, visited all lands, seen all the human races, spoken all languages, examined all the beasts and flowers and minerals of creation, and am approaching Home. I bring no collections with me. My trunk contains nothing but a spare change of clothes,—and my diary,—and that is written in cypher which no man nor woman can read. I

alone can read it—and the Supernals. One thing only in it I can recount to you—*there is no such thing possible as Human Knowledge; nothing in the whole Creation is understood;* forms and motions and proportions constitute the sum of Science; all wisdom of man is exoteric, there is no esoteric philosophy which is not Maya, and delusion; and I even suspect that the disembodied spirits could reveal to us nothing deeper than the surface strata of that Universe on which we seem to live, but which is probably nothing but God himself, and we mere cells in the tissue of his body. Vain is the pride of intellect. Vain are the predictions of a coming Messiah-Science, giving us a new Truth-Epocha. Sciolists strut their day in the purple of learned silliness. The wise sooner or later retire to their solitary cells in the woody mountain sides of beautiful Nature, and temperately satisfy themselves with the everlasting rock spring water of the love of the beautiful, and with the wild honey of the love of their kind. The happy hermit keeps his she-goat, and cultivates his cabbages, and plucks the grape of his trellised vine, and admires the peaceful and the stormy skies, the silent night and soundful day, the roaring and the placid sea alike and equally, and buries both the Past and the Future in a common grave beneath the flowery sod of the everlasting, ever-blessed Present. Blessed are the few souls who become such hermits of God at their very birth, and never leave their hermitage—and are never driven from it by the inroads of civilized barbarians. Better be struck dead by lightning at the mouth of our cell than be seduced from it into the world, —to become slaves of the World, the Flesh and the Devil, as the rubric well expresses it—with a better wisdom than it the rubric itself is aware of. . . .

CHAPTER XXXIII

The Milton Home. 1885–1887

In the spring of 1885 a beautiful thing happened to my mother and father.

It was more than thirty years since they had left Milton, the home of their early married life. During these years in Philadelphia they had often yearned for a return to New England, and, even in the midst of engrossing cares and a life full of enjoyment, they had from time to time expressed a desire to end their days among the scenes of their early life together. In the autumn of 1885 two friends, in the most thoughtful and affectionate manner, made such a return possible. My mother's cousin, John M. Forbes, and her brother, Edward H. R. Lyman, built for her and gave to her a suitable and *delightful* house, in a lovely part of Milton, in a region long known as "Columbine Rocks." The house stood on the top of a mass of conglomerate, well back from the road, and surrounded by tall walnut-trees, with a view of the Milton churches in the distance." *

It was a home which filled every desire of my mother's heart. In it she spent her summers and autumns for many years; and finally, when my father's health broke down, they made it their constant residence.

When she first entered this Milton house in June, 1885, she found that some of the young cousins had furnished it completely from top to bottom. All was in a simple and perfect taste, and beautiful flowers filled the rooms with perfume.

Her heart overflowed with gratitude, and she joyfully accepted what had been given her with such thoughtful kindness.

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* In one of these churches my father had preached for two years, and in the other my mother's great-grandfather had preached for forty years.

THE MILTON HOUSE

WOOD PATH

Here she could rest from her many labors, and here my father also spent many weeks. As time went on, a large upper room, built for a studio, was devoted to his purposes, and he delighted in its space and solitude.

They both came to love every foot of the little place, and to tend the plants and trees in summer with a constant delight. At first the house was almost alone in the region, and the woods stretched away behind it to the little river. In these woods my father loved to wander when he could get away from his desk and drawing table, and here the grandchildren could play in safety without fear of disturbing any one. Columbine Rocks, or "The Walnuts," as it was sometimes called, became the haven of desire to all the family.

In August, 1885, my father delivered at Ann Arbor his address as retiring president of the American Association for the Advancement of Science.

PHILADELPHIA, *July* 5, 1885. PETER LESLEY TO HIS WIFE.

. . . Woke this morning wishing I were in Paradise, or in Milton. My joy however would break out continually afresh when I thought how delightfully Milton's "Paradise Regained" has been reduced from poor poetry to fine prose for you, my best beloved. If it were not for the publicity, I should address all my letters to you thus:

TO SUSAN I. EMERITA,
Paradise Regained
in Milton, Mass.

N.B. At the brink of a glorified gravel pit.
N.B.B. Surrounded by a choir of angels.

MILTON, *Sept.* 26, 1885. PETER LESLEY TO ——.

. . . I am lingering along in this sweet resting place, in order to acquire the faculty and merit of irresponsibility—too late in life perhaps to put it to good use. Day slips along after day, like yachts in a long race, and disappears beneath the horizon; but their sails are white and there are plenty more to come. I write just five pages a day—that is all—but that will make 1800, a year, and that is enough, the printer knows. It is hard writing, but it leaves a fairly sweet taste in the mind's mouth, and no bitterness in the belly—such as the prophet's roll left. . . .

[PHILADELPHIA] *Sunday, Oct.* 25, 1885. TO HIS WIFE.

. . . I feel a great longing for you this morning. The silence is profound; the sunshine pours through the great glass window of my study; books, magazines, pamphlets, memoirs, reports, sent to me from all quarters during the last five months, invite my attention; but a great weariness, or rather lassitude, overpowers my faculties and suppresses curiosity. I have a hopeless sense of the inexhaustible, unconquerable, inapplicable, filling all the atmosphere. The million unseen and unheard human beings of the great city outside the room, so near and yet so far, crowd me and stifle me; and the five million citizens of the State, who own me as a bought slave, seem more like an invading host of foreigners than as friends and cousins. Happy the man who emancipates himself in spirit by alliance with the Creator of all these insects, and finds self-freedom in an exclusive voluntary δουλεία to Him. . . .

It is very wearisome to be able to think of nothing but the duty we owe our fellow-men. When this habit of drudgery gets established, the joy of individual existence gets suppressed, and the thought of death becomes an anticipation of liberty restored, paradise regained. Surely the irresponsible, undutiful character of childhood should rather be encouraged than punished.

My life seems like an abandoned brown hematite mine in the Great Valley. Plenty of fine, middling and poor ore has been dug from it in past years; there is a great quantity of the best ore still under foot. But it costs four times as much to keep the mine open for the second fifty feet in depth as it cost to mine the first fifty feet; and to descend another fifty feet will bankrupt the operator. A new system of mining must be resorted to; a complete change of plant; a shaft, cross-cuts and gangways must replace the old open cut and side stopes; and the upper ground must be allowed to tumble in and cover up the new work as it advances.

I look round my library. The walls threaten me with destruction. I shall perish by the inslide of my wealth.

I wonder how an old walnut-tree on a hill-top feels when half its branches are dead, and it no longer feels the vigor requisite to perfect nuts. Does it enjoy the sunshine and breezes? Does the rain please it; and the coming of lovers to sit at its root and sketch the prospect? Does it feel sympathy for the goldenrods and asters; and for the sapling walnuts which are commencing their careers as underbrush? And do these things satisfy it, and make it love the God of trees? and make it love Men, the

users of trees? and fire, the translator of trees? Does it want to tell its story—that lonely tree—do you think, my dear Susan? . . .

PHILADELPHIA, *Nov.* 1, 1885. PETER LESLEY TO HIS WIFE.

. . . Yesterday I went to the Academy and saw the Kindergartners * hung pretty well next above a somewhat larger picture which was on the line. It was a little tipped forward and had no glare on it, being in the corner.—The Rosebud* was on the line and looked better than I ever saw it look. Mrs. Hallowell was hung high, like most of the portraits there, and looked well from the sofas.—G.'s girl was hung high, and produced little effect except that of excellent, strong painting. It is not a pleasant subject to have in a room, and such pictures ought never to be painted, when there are so many thousand agreeable subjects waiting their turn. Pain and want in *successful* conflict with their foes are at least stimulating; but *still*-life misery, patient endurance, incapable of changing fate or even showing fight, no one cares to look at, and therefore ought never to be portrayed, except for church purposes. The sad world wants lightsome shows, high colors, effects out of the commonplace run of things, and it is the artist's fine mission to provide weary people with this sort of solace—which they can hang up and frequently look at. A living room hung round with the best dead ancestors by Vandyke, Van Eyck, Rubens or Moroni in their grandest style of the admirable art—would send the family into voluntary exile. It would be a funny legend—"Exiled by Vandyke in the downhill of life," etc.

Harrison's great canvas is a *chef d'œuvre* of crude and stupid French gray—air, earth and sea, sand and naked boys, all in half-light, chilly and uncomfortable, and utterly uninteresting; a masterpiece of vacancy and nothingness; an impudent foisting upon society of a *tour de force* for what ought to have been one of the most attractive and delightful bits of all-alive seaside scenery. Lord forgive these young artists; they think the world was made for them, instead of they for the world's delectation; and they grasp their subject with the one notion in their heads that it is a good pair of scales for them to find out by how many additional pounds of genius, or rather of technique, they have gained in the preceding twelve months, by virtue of Parisian atmosphere and diet.

There is a tremendously fine life-size portrait of some artist

* Pictures painted by his daughter.

by himself in his studio, and in sailor costume. Good Lord of Parnassus! how it stirs one's blood to look at it; and what a treasure it would be to some pale student who could every hour or two lift his dimmed eyes to it, and thank the God of nature that the forces he put into it are still in their pristine vigor, in spite of the demoralization of individuals' nerves. *That's* the sort of thing to paint. And I must say that M.'s portrait of herself always affected me in somewhat the same way, and I am sure that it will strengthen me many a time in future when I look at it. Only I wish it had more robustness of health in the face.

Bring out the best, and the strongest and the beautifullest that is in the person or the thing, or else don't paint it at all. The mere precise and perfect *re-presentation* of a thing as you happen to see it at the time, is work for a monkey to do, but not for a divinely gifted human artist. What the world wants of the painter is not a piece of representation, but a piece of *RE-VELATION;* to lift the curtain too long dropped of the commonplace, and show in a continuing form what in life only unveils itself momentarily and at intervals. The lover says to himself, "Oh that I could always have that heavenly smile, that inspired look, that witty glance in her eye perpetually," and he goes to an artist to see if it can't be accomplished. He will slave to pay for such a boon. But the artist has been taught in Paris to paint only what he sees; and in Paris the only remnant of the old idea of "blasphemy" is preserved in the word "*chic.*" No, he can't grant the lover the blessing for which he craves and pines. Damn this *chic*, say I, and please put a piece of it on my plate.

The two pictures which pleased me most were elaborate interiors—festival scenes, crowded with figures—gorgeous with colors—ill drawn, slovenly painted, unnatural, impossible scenes, regular fairy tales, but just what I should pay lots of money for if I had it, to hang them where I should be surest to see them frequently. I wouldn't be that particular artist for no money; but were I a pallet-holder, that would be the kind of picture I should prefer to paint; and while I should not absolutely exhaust my color-box, and shame the solar spectrum by overtopping its extravagance, I should try to come as near to that same end as possible,—with neater drawing and a very leetle more judgment in chronism—*i.e.*, not so much anachronism. But it is not the chronism, but the chromism, that I am thinking about. Our painter I fear has gone mad over those Venetian fellows; but

really I should like to be able to take some active professional or amateur share in his madness.

PHILADELPHIA, *Nov.* 19, 1885. PETER LESLEY TO HIS DAUGHTER AND SON-IN-LAW M. AND C.

. . . We are reading Mrs. Agassiz's life of Louis. It is beautifully written, skilfully arranged and intensely interesting. I knew and admired Agassiz, but venerate his genius more after reading each chapter of this memoir.

I am writing my summary slowly, but enjoyably, and with a quiet firm sort of confidence that it will be worthy of its subject. Still, the subject has grown rather commonplace; and the moral element of grandeur is absent from all mere material phenomena. We can personify nature and give it *moral* grandeur—but not in a summary of the Reports of a Geological Survey. It is all sausage meat. Perhaps I can safely infuse a little capsicum, but hardly dare to attempt it. Doric columns won't stand acanthus leaves. . . .

HOME, *Jan.* 31, 1886. PETER LESLEY TO HIS DAUGHTER MARY.

. . . Your letter received last Friday filled me with delight. I know you think of me by day and sometimes dream of me by night. You are a sandwich, between beloved and loving parents, and loving and beloved babies. Talk of new stars! "*Novæ*!" Let them, and welcome—the prosy astronomers. What are two clouds of hydrogen in distant space to a *Novus et Nova* in one's arms, rosy and roguish, flesh and blood, blue-eyed and wholesome? What is astronomy compared with mat-pat-ernity? Bah to it! Pooh-pooh to it! As if the *savant* had conceived and begotten and borne his stars! What does *he* know of fatherhood and motherhood and ownership and investigation and glorification and all that sort of thing? Did he ever strip his star naked and pelt it with pillows? Not he. Did he ever suckle it and work for it, and kiss its little dimples, and wrestle with its buttons, and tell it Mother Goose stories, and prophesy for it this and that career in coming time? Not he. A star may be a very fine thing, and a variable or new star, to which a man can attach his name, as the traveller scribbles his autograph on one of the stones of the great pyramid. But one live baby is worth all the host of heaven; and two live babies will outweigh the entire universe.

I wish Charles and you could have made the fifth and sixth

of our circle in the parlor after dinner yesterday, while the mother read us No. 2 of dear old Lesquereux's autobiographical letters. "How pathetic!" exclaimed Meg every now and then. And so it was. He recounts his miraculous fall from the mountain top. You remember, dear Mary, when we stood at Berthoud's door in Fleuriers, and Désor and Berthoud pointed over the valley to the top of the cliffs from which the little Lesquereux slipped? Then he tells of his school-days at the neighboring village; then of his young college life at Neuchâtel; his stupidity in Latin and Greek; his getting the *prix des ânes* (a great prayer-book) for *bons mœurs;* his mother's despair; his pleadings to be allowed to be an apprentice in his father's watch-making shop; his return to Neuchâtel, not to the college, but to the Academy and to a new and happier life. His next letter will recite that. . . .

Yesterday I had the joy of writing the last line of my paper for the Institute. I shall read it in Pittsburg, February 16. . . .

In February my father delivered an address to the Institute of Mining Engineers.

PHILADELPHIA, *March* 7, 1886. PETER LESLEY TO M. AND C.

. . . I am excessively tired—have been so for several days—right elbow painful, arm like lead, too constant writing, too much Stromatopora bed in No. VI.—*Eoskorpius osbornii* in water-lime—too many references to verify—too many drawings to hunt up—too much grinding of slices for the microscope—too much geology with too little comedy—in fact, too big a book on hand for one old brain and one lame hand.

So I neglect my children, who are always in my thoughts, especially when I lie awake at night. But your letters are so lightsome—so sweetly jocund—so full of baby baskets and a new home, picnics *in posse* on a 175 x 75 lot, and a happier St. Paul than I can find in the King James translation—that I fall into no fits of anxiety about you. Moreover the winter is past, and the time of the singing of birds is come, and we are to have two fine comets wheeling round the north pole together on the first of May, and then—in June two little and much finer comets for our Milton sky. The real comets will no doubt make a national sensation. It is a rare event. The astronomers are much excited.

. . . I have consented to deliver the address of the New Laboratories of Smith College, at Northampton, in June.

PHILADELPHIA, *March* 25, 1886. PETER LESLEY TO P. W. SHAEFER.

MY DEAR OLD SHAEFERLEIN,—No older, nor more of a *lein*, than I am myself—but I love the epithet because Désor gave it to you—the dear old fellow—our old Désor—how I miss him! No, I have not *quite* forgotten you—not much! if I know it! What many good days and hours we have had together, and what a lot of good friends in common! But they are all gone—Désor, Rogers, Henderson, Jackson, Whelpley, Hodge, McKinley—all gone but Lesquereux, and he will be eighty next year. I must read to you some day the series of letters he is writing to me, describing his infancy, boyhood, college life, teacher life at Eisenach, professor life at Le Locle and La Chaux-de-Fonds—thus far his seventh letter brings it—the next will describe his marriage—the rest his family life, his deafness, his immigration to America. From that date on, I have a complete history of him in my portfolio of his letters. You have no idea how fascinatingly he tells his story. The dear old man. If you would like it, I will send his letters in a package by mail to you, and after reading them, you can secure their return to me.

I have turned from the study of the Huronian rocks to write this letter to you. I work and work and accomplish little. I work every day from nine to four, seven days in every week of the year. I have no holiday. I am buried in my big book. Whether I can write it, after all, is still a question, but I have a huge pile of manuscript already—half, two-thirds, three-fourths of which I will eliminate or boil down to the smallest size. I have gone into fossils—what a job it is! We have good collections, but I have no State money for draughtsmen. I do not dare to divert a dollar of the Appropriation. I am spending from $1000 to $1500 a year of my own salary to accomplish some long-delayed objects. I have rigged up a little microscope laboratory in my house in Clinton Street, and my brother Henry (who has loved the microscope for twenty years) is now wholly devoted to slicing and studying specimens. E. B. Harden photographs them, and the photographic prints (X 20, X 35, X 100, X 1500 times enlarged) are beautiful and curious. I could not get ready to publish any of them in my Annual Report of 1885, now going through the press; but I shall have a lot of them for the Report of 1886. I find that the crystalline limestones are all crushed and recemented, the grains twisted round at all angles to each other. I have found hundreds of minute organic forms in other limestones. My object is to subject every limestone in the

State to this investigation. If you have any rock, the internal structure of which you wish very much to know, send a sliver to me and I will have it ground, mounted and photographed for you. If you have any genuine specimens of limestones in your cabinet, the exact place of which (geographically and geologically) you are perfectly sure of, from your neighborhood, or any place inside the State, I wish you would send chips to me to examine. I have no money to spend on travelling collection, and must trust to my friends sending me certified specimens. I mean to examine the four known beds of limestone in the Wilkes-Barre neighborhood.

I have had nice slices made of Cornwall ore among other things. My report, with d'Invilliers', of the C. mine will occupy a good many pages of this report and will be illustrated.

I shall give your kind greetings to my wife and daughter at lunch-time. . . .

On April 7, 1886, their youngest daughter was married to Henry K. Bush-Brown, a young sculptor.

April 11, 1886. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

You needn't read this to my Mary. You needn't read it yourself, unless you choose to do so. But if I don't blow off to some one I shall explode, and astonish the world with the number and smallness of my fragments.

The worst of it is I find no relief from work any more. In fact work disgusts me; I am tired to death of it; it is so frightfully monotonous, so unsatisfactory, so μη τελευτον, in such a state of confusion and incompleteness, so vague and undemonstrable, of so little real use to anybody, so unremunerative (in the best sense of the positive of that dreadful negation of negations). I have as little hope of release from this slavery as a Tunisian galley-slave—and am as lonely in it. There comes a day to every soul when "it is better to go hence, and be with Christ," . . . but . . . it is better for Paul's friends for Paul to stay where he is, and let things take their own course. Patience is a good root, and will sprout again after being cut to the root.

I find my hope sprouting a little when I think of the middle of June—although it will be a weary sixty days waiting till then. But you and Mary will bring the babies, and we will be happy

together for at least three months. Beyond that I have no telescope of power enough to see asteroids.

Your letters are a great delight to everybody. Write—if you have only two minutes and on a scrap of wall paper. Write—if you want us to survive. Write—even if you have only an inferior sort of Christian charity at your command. Write—whether you have anything to say or not. It will always be righter to write than not to write—there is no question about it. Write to encourage us in the faith that we have something left us in the world. Write to put a penny in the box—dip your finger in an inkstand to cool this burning tongue, for I am consumed in this flame. Write to your lone lover,

GUMMIDGE.

May 2, 1886. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I have so absorbed the photographs that I have you all in plain vision all the day, and whenever I am awake at night, and sometimes in my harum-scarum dreams, which grow more *bizarre* and ludicrous in their composition as I grow older and foolisher in years and intellect. But a great advantage accrues from them—several indeed—1. I can bring a smile to your mother's face as she combs her hair,—2. I can comprehend "Alice in Wonderland" and "The Water Babies" better,—3. I can even partially tolerate "The Snark,"—4. I lose my fear of becoming a priggish old sage in my declining years; or an impracticable saint; or a machine mind; or a professor K. or professor J. or professor S., three types to which a career like mine is always threatening to tend. Odd—isn't it,—the man whom I would most like to resemble, the only man in fact whom I ever knew and felt the least wish to be like, is my old, dear, ugly, furious, angelic, Mephistopheles-like, Hegelian friend of Halle, in 1844 and 1863, Erdmann. He is absolutely the only other creature wearing boots and a necktie whose place I should willingly consent to take in the universe.

Do you wish to know what I am doing? I am writing a sketch history of our Survey, for Major Powell to use in his U.S. Geological Reports.

I have just sent to press general considerations on gas pressure, quantity, and fuel value, to wind up the seven hundred page annual Report for 1885.

I am writing a preface to said volume, while the index is preparing at 907 Walnut St.

I am writing a full description of No. VI., especially its stromatopora sponge coral reefs.

I am reading, marking, and extracting all the serials, to spot everything new regarding our geology.

I am in constant consultation with Ashburner, Harden and ——, and have a wide state correspondence all the time. In fact I work from nine to four per day.

This is why I write to you and Charles so seldom. . . .

. . . Meantime the father and mother live alone together as best they may, enjoying the past and the future, and well able to conquer the present by stooping to its necessities. There is no fort to keep better built, nor better armed and provisioned, than constant and varied employment. It will virtually resist both long sieges and sudden surprises. Such should be the life of an old man and an old woman who have grown gray from too many of God's blessed attentions to them—too many prosperities and happinesses—too much love and light and comfort. Yes—the great interest of the day is a curiosity to see how the evolution of history will bring about a still wider distribution and a still more complete and sinless and fruitful realization of the goods of providence among the families of Christendom. Must it always be that a percentage of lees precipitates from the wine—that so many in a thousand men, women and children, are mathematically destined to starvation of soul or body or both? We will see. Or, at all events, sooner or later it will be seen. The fundamental principles of Ch. Fourier, St. Simon and other communists, are bound to be again and again applied to practice on a much wider scale than they ever were. *Science* has become fairly enlisted in the *experiment.* Men of science are showing themselves radical communists. And men of science are the real rulers of to-day. The Sceptre has departed from the Barony, from the Brigandage, from the Bureaucracy, and is departing from the Plutocracy,—and Physiocracy now holds it, and will soon command all human social forces. You and Charles will live through a radical and universal revolution. It commenced 150 years ago—or rather its seeds were sown then—but they have so sprouted that a few years will bring the harvest. But what kind of harvest? Oats—or wheat? Wheat full of poppy blossoms? And the wheat must be reaped and threshed and ground afterwards, and the mills of the gods grind slowly. So the end of the world need not be expected yet awhile.

I wish I could dine with you both and the boy and the baby. . . .

PHILADELPHIA, *May* 22, 1886. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Last week I was much engaged on the Preface to the Annual Report of 1885.

This week I have been sitting up and waxing in a model of the plications of No. IV. in the Seven Mountains. . . .

My father invented a method of model making, which became a favorite among his students and assistants. The contour lines of each given level were carefully drawn and cut out by jig-saw on successive layers of thin wood. These when superimposed, produced a rough relief map of irregularly contoured surface. Then the whole was made smooth with wax, after which the surface was painted geologically. Some of these models were beautiful to the scientific eye, and all of them were true to nature and scale, both in their horizontal and perpendicular elevations.

HOME, *May* 27, 1886. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . The eight-hour movement with nine-hour pay, &c., has collapsed. A funny strike in Chicago for ten hours, was resisted by the firm on the ground that it had yielded to a previous strike for eight hours and arranged its business accordingly and was unable to carry on business in such a shuttlecock fashion.

To-day is a great day at Cleveland where the Knights of Labor are reorganizing their vast forces under the great man Powderly; and a great day at London, where the Liberal Party are trying to reorganize their forces under the Grand Old Man Gladstone. These are the two monarchs of 1886.

May 30, 1886. PETER LESLEY TO HIS WIFE.

. . . So I had to stop and tell you how I love biography!—You smile. Why? Have I caught your infection? Not at all. It is in me by nature; but suppressed. This hard salt herring diet of science on which we mendicants are forced to live, does not entirely destroy (thank God) our taste for finer food. I never *loved* facts as I loved *people*. I only feel sorry sometimes that as the world of facts is my workshop, in which 19–20 of my life *must* be passed, your love of persons makes you natu-

rally and inevitably so indifferent to facts, that I can seldom present one fine enough to arrest your attention.

MILTON, *May* 29, 1886. SUSAN I. LESLEY TO HER HUSBAND.

Then I sat by my window, looked at the dear old church spire, and thought of my great-grandfather, and had pleasure in watching Amos who was at work on the oval.

But, ah! I miss the old horse and chaise from Brush Hill, but one generation passeth away, and another generation cometh, by a most blessed law of nature.

I heard the tramp of a horse under my window, and the well-known sound "O Susanna!" and out I went to have a most affectionate greeting from Cousin John and a "What can I do for you?" and "When's Peter coming?" and off galloped my Cousin John.

And as I sat alone in all this peace and beauty, a dear Bob White piped up quite near. But he must have been a very wee one, who had not fully learned how, for he would break off short at Bob, for the longest time, and only the last hour has really sung "Bob White." I love him.

I can't trust myself to go up to the Studio to-day, but I think I shall to-morrow. . . .

HOME, *June* 1, 1886. PETER LESLEY TO HIS WIFE.

. . . Now, my gentle mistress, pray honor me with your reasons why I must not follow you to "The Walnuts" (if that be the name you have adopted for your cottage on the Columbine Rocks) just as soon as I please. You say that all is in perfect order there. Would I act like the snake in Eden, and introduce sin and all its woes? Would Amos and Rebecca object to an extra man about the place? Is Rasselas to be kept sitting outside the boundary of the Happy Valley very long? Cyprus was a beautiful island so long as Venus stayed, but when she married Vulcan and moved her shrine to Sicily, all the tribes of Greeks migrated to Syracuse, and Gelais, and Himera, and Agrigentum. Can you expect me to be quietly satisfied with the ice-cart and milk-wagon, and the horrid cries of the two "Strawbry" boys, while you have the little Bob—Bob White all to yourself? In truth, if you write me another such delicious epistle—I shall take it for a Bob White call, and answer it in person. Human nature can stand a good deal, but no husband need be ashamed of confessing that his powers of endurance are limited.

Now let me give you *my* diary. It will not bear a comparison with yours, but you must make the most of it, seeing it be honest.

Sunday evening I went to church and was blessed by my good brother-in-law, who finished what he had to say of the Quaker preacher's inspiration, and the inspiration of other preachers and people; and he was so moved that his voice was pitched on a tender, mellow, trembling key, which held all our hearts spell-bound. We were like the dry grass-blades and corn-stalks of summer silently happy under a downpour of rain. I walked all the way home, dreaming of invisible and far-off things. Monday morning came Meg's dear letter, which I mailed to you. Then I struck a satisfactory trail of thought through my address jungle, and pursued it until dinner time. Mr. Ashburner came to consult me, and I became so weary that I went off to play billiards.

. . . Tiring of play, I went up into the Library and tried to amuse myself with Toby's diary in Parliament in *Punch*. Fun grows rather dreary after twenty minutes; but there is an undergrowl of the dreadful in all English jesting which saves it from the charge of frivolity. What I notice most, is the modern substitution of realistic portraiture of all the actors in English politics, for the sham respect for men of name and place, a hundred, or fifty years ago. The Cartoon of "The Two Grand Old Men" is very touching—fine in the true English blood sense. Gladstone faces you with his great speech outspread, as if it were a sheet of music, and he were singing at the footlights; behind him, at a double-grand, seated in the characteristic attitude, Liszt is playing his own music at a London concert,—a man of eighty-six; and Gladstone, seventy-seven, spoke three hours, holding the House of Commons rapt! Who ever did that before? And was there ever such a debate on dividing such an Empire!

The pith of the sketch is the fact that there were people who went from listening to Gladstone, directly to listening to Liszt, the same evening.

After tea I read Bonney's discussion of Metamorphism in his anniversary address to the Geological Society—until the sky through my window, and the subject through the multiplicity of technical terms, and complexity of the whole phenomenon, grew too dark for me to see. Then came the witching—no, the black witch hour—horrid and hopeless—for I could not leave the house. . . .

June 4, 1886. PETER LESLEY TO HIS WIFE.

. . . My address * took definite shape this week, and I have it half done; but as usual I am very much dissatisfied with it. It seems to me like a missionary's sermon on landing in a foreign country. I do not know Smith College or the Smith Family, and as they are all girls I shall make some great blunder.

They invited me to hear Mathew Arnold talk on Education at the University yesterday, but I did not go, for I dislike the man. But last night I sat up an hour in my bedroom reading his (first) article in the *XIX. Century Review*, on "Liberalism at its nadir," and got a better opinion of his judgment. But his style is so cocky that it is intolerable. He is very clear and forcible, but abominably dogmatic and I should say impudent. He talks to Gladstone, *et id omne*, like a slave driver, or book censor. Says he is a fine party leader, but no statesman, has eloquence and honesty and tact and magnetism, but no *insight*. The Liberal Party has no *insight*. Nobody has any *insight* but M. A., and a few of his friends on the Continent.

I was agreeably disappointed at the end by finding that he proposed as an alternative plan to Gladstone, our American system of State legislatures, Ireland to have one for each of its three provinces. . . .

PHILADELPHIA, *Nov.* 25, 1886. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . It is Thanksgiving Day, so called. I give thanks always as St. Paul directs, and as my heart heartily assents. No one mortal ever had more to give thanks for. If gratitude grew cold or weary, it need only reflect on sixty-seven years of perfect prosperity.

. . . We hear of wild storms in your region; but on this coast a wonderful autumn has smiled without cessation. I see little of the outdoor sky, for I spend hours every day dictating to a shorthand writer, and reading "Monte Cristo" and other books to keep my imagination vivid; for I have the ambition to write a book that shall be true and useful, and yet not prosaic or commonplace. I see no harm in letting one's spiritual countenance shine and burn before the public, if it have any light and pleasure in it. I have lived past the American and English dread of nakedness, where there is no deformity. A thousand things remain unsaid, because there is a popular prejudice against mixing

* On June 22 my father delivered this address at Smith College.

them with facts and formulæ. I mean my book to be an expression of as many sound principles as my individual experience has verified; and I wish to use facts only as illustrations. But I shall not make a catalogue of principles; nor review them all in line, as if I were a generalissimo. Lyell and Geikie, Phillips and Lubbock, and many other masters of the science have done that with more or less success. But they weary the spectator, and send him away dazed with the show, but as little able to take part in it as if he had never seen it.

I shall insist only on the fundamental truths, the dominant ideas; and try to make them so well understood as to leave a permanent impression on the reader's mind. "Mass your forces and concentrate your attack"—was Napoleon's secret of Victory. Easier said than done?—Yes, verily; but one can only try.

What is Christianity but the enforcement of two or three ideas —that the Creator is incapable of imagining a hell—that Jesus may be imitated—that every man has as much right to all good things as I have—that the soul ought to be stronger than the body —that nothing but virtue is indispensable—that the more one loves the richer one becomes.

I feel as if this grand simplicity of Christian wisdom has its counterpart presentment in a few predominant ideas of science, which once acquired rule the mind, and make a man of science out of even an untutored layman. Is it not so, my dear Charles? Is it not true in literature, in business, likewise? Man wants but little, but he wants that little strong. Every sound principle covers a multitude of facts. I wish I were as capable of realizing the conception as I am certain of its truth; but I am not as downhearted about my ability as I was two months ago. My forces seem to have had something of a revival, and I shall in any case do my best, and that my God will be satisfied with anyhow, whether my fellow-creatures hiss or clap. But what a small part of the history of duty is made up of appreciation! The greatest blessing of old age is its emancipation from the dread of criticism, —the glorious discovery that the only infallible critic is in his infinite and eternal nature, the warmest-hearted and most appreciative admirer of what is honestly attempted, though unsuccessfully executed. . . .

Dec. 21, 1886. SUSAN I. LESLEY TO HER DAUGHTER MARY.

Oh, I am so glad that you enjoy the "Recollections"; * you never were unsympathetic about it, but I think we all of us, as

* Recollections of My Mother. 3d edition. By Susan Inches Lesley.

we taste the varied experiences of life, enter more deeply into the lives that have gone before us. I am sure it has been so with me. I put my whole soul into that book, and must have seemed very absent and absorbed while I was writing it, and very negligent of my duties to all of you. For I had to live over my whole early life, in order to make any picture of my dear Mother and her influence. . . .

Sunday, Jan. 16, 1887. PETER LESLEY TO HIS DAUGHTER AND SON-IN-LAW MARGARET AND HENRY.

. . . The bright, beautiful good day has nearly come to an end. At 10.30 o'clock we two old lovers took the cars to Broad and Walnut, and the front seat in the Hall of the Natatorium. Mrs. Murray played two simple pieces on the organ; Mr. Weston (Ethical Culture) introduced Mr. Gannett; then Gannett made a noble, profound, perfectly clear, true and stimulating, sometimes sublime, always earnest, address on the Faith of Ethics, which he wrote for and has delivered before several Unitarian Congregations. I was charmed. The audience was rather large and very attentive and sometimes moved. There was a strong Jewish element in it, children and grandchildren of Jews.

. . . It is 9 o'clock. I have heard an archangel. I have listened to the greatest preacher in America; at least so it seemed to me for a whole hour of unsurpassable eloquence, and fervid force of warning, entreaty, exhortation, holding up Jesus in full view and making "life by bread alone" unspeakably worthless and degrading, as contrasted with "life by every word of God." It was the first passage in the legend of the Temptation. I was enjoying the expectation of many more such exhortations, when I was told that the great apostle was "Nichols, of St. Louis." So, after all, all that is grand and great and true is swept along the tide of migration into the Great West. I can now credit the possibility of a regenerated, revivified, rational and spiritual American Orthodoxy in the future. If this be Orthodoxy—Presbyterian Orthodoxy—God grant it may never give place to any other phase of Christianity.

What an amazing contrast of the same wonder under two infinitely unlike forms, may happen to us in a single day! Wm. Gannett's Faith of Ethics, and this man's Faith in Jesus! But the greatest marvel is that the same spirit animated both; both were equally acceptable by reasonable beings hungry for truth. I must confess however that *this* bread was the better leavened

and the more nourishing—*to me*. But I care little to criticise, discuss or define the form or flavor of the bread; what I want is the nourishment from its digestion. The personal question is always: Do I grow? grow strong? grow better, nobler, wiser, more like the Ideal Man, the type of God? "Ye shall be like him, for ye shall see him as he is"—Shall that really happen? Can I do anything towards making it happen? *Am* I doing anything to secure it? Life wanes; death approaches; what after that? The young can easily flatter themselves; the old dare not:—if they have acquired the habit, they must hasten to break it. How blessed are they who in youth turn a deaf ear to self-flattery, and to the sweet music of the flattery of their friends, their coterie, and society; and so are saved the disaster of acquiring a taste for it—and the distress of having in the end to undo all its consequences! . . .

Jan. 17, 1887. PETER LESLEY TO M. AND H.

. . . I commenced again my dictation to-day, after a rest of half a week. I got swamped in the details of No. V., and did not know what to do, or which way to look for a path through the morass. But it only needs to wait awhile, and rest a bit, and the traveller will find fresh heart to plod, and clearer sight of objects to direct his steps. I dictated with great ease the southern outcrop along the Kittatinny mountain, describing the water gaps in succession. I have continued this description to-day; and to-morrow I shall begin White's sections on the West Branch Susquehanna at Danville and Bloomsburg. It is intensely interesting, in spite of my long acquaintance with the subject—long enough to wear out any amount of enthusiasm. It was in 1839 (48 years ago) that I found the first block of ore in No. V. ever seen east of the Susquehanna—at Port Clinton, one fine morning, while I was fighting my way through the underbrush and over the rock slides along the bank of the Little Schuykill, at the foot of the mountain. I was as usual alone, in a forest, utterly secluded from men and men's affairs. I could not see the little village on the west bank; it was scarcely more than a tavern, a store and a blacksmith shop. The engineers were at that time laying out the line of the Reading R.R. I could only see the beautiful water by my side, and the rocks over which I stumbled, the trees which thickly covered the steep mountain slope, and now and then a fleck of sky. How happy I was in those days of strength and zeal and poetry! How pure life seemed; how unending the career of a mortal man! . . .

PHILADELPHIA, *Feb.* 13, 1887.

. . . The great New York strike is ended—ended in the defeat of the men; and the ruin of Association of Knights No. 49. I think it will prove to be a benefit to the order; for this famous 49 was a powerful political machine, worked by two or three selfish, unscrupulous men. Every such defeat teaches the workmen and laborers *this*, if nothing else, viz., that their leaders are not infallible. Herein work-organizations differ from religious systems; the wisdom of the latter can never be practically tested, proved or disproved; but the wisdom of the councils which regulate business affairs is always openly and ruthlessly criticised by events; proved true by success; proved false by failure.

Lanciani lectured on the Campagna last Friday. This week he lectures at Bryn Mawr on the Forums, on the Palatine palaces, and on the Campagna, and I think Ruth [Putnam] and I will go out to hear the last one. . . .

My MS. has reached the 300th page. It goes very slowly; but it goes; and I am not impatient. Next Thursday the Board meets again at Harrisburg, and I must be there. We shall meet the Appropriation Committee, and I trust that an appropriation of some kind will be granted to the Survey for the next two years. . . .

Feb. 27, 1887. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I am glad that you think the boy has a good memory; but take for granted, I beg of you, that the girl has an equally good memory, whether you notice it or not. Let me earnestly beg of you to begin early with both of them to store these precious memories with *short, eternally good bits* of *poetry.* Take warning by your poor father, who in his declining years lies awake of nights longing for one—just one—beautiful verse of some fine poem—for some two or three verses of David's Psalms—for some grand sentence of condensed divine and human spiritual and intellectual food—and unable to remember even *one.* I ascribe it to not being made to memorize such things in my infancy and early childhood, by *hearing* them read or recited (not reading them myself) by those about me. Your boy can just as well stow away in his memory a fine stanza of Wordsworth or Milton, or a splendid sentence of Jesus, or the Prophets and Apostles, as a ridiculous Mother Goose. . . .

March 7, 1887. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . I have just commenced my chapter on No. VI. I have to repeat incessantly that we know but little,—that classifications in geology are almost as misleading as creeds in theology. My book will be an Index of Protests against dogmatic science. It will resemble other text-books very much as a water-color *after* it has been held under the hydrant resembles itself *before* that moderating operation. No. V. has stretched out to 180 typewrit pages. If my broods of paragraphs continue to multiply at that ratio, I shall never live to see the first coal bed born, What a world of facts it is! I always despised facts. Yet laws and generalizations get mighty tedious without facts. Facts are the little children in the Tuileries garden; laws are their *bonnes*. What would be a garden full of *bonnes*, without the rollicking little crowd of babies about them? *Pure* science is awfully unpicturesque. One could not live always on a high horse. One cannot always cultivate *deportment*. *Va-t'en!* There is no help for it. One must move on. . . .

My mother had great respect for the faithful man of business, and in a letter of March 7, 1887, expresses that feeling to two young friends.

. . . We feel that you and —— are becoming what Emerson says is the highest of all arts, masters in the art of living well—good citizens—good householders—good father and mother—good neighbors—radiating light, warmth, comfort, in countless directions, which you cannot see yourselves—any more than the makers of history can set it down. And can any writers of history—of political Economy or Philosophy do more? I think not, and yet I hope and believe that middle age will bring you another result of all your labors in youth—a competence sufficient to follow out any or all of these ideas if you have them, with the added wisdom you will have gained from the conduct of affairs and the guidance of others so long. Ah! we so often feel that we direct our destinies. I have not found it so, but know now, looking back, that each day's duty in any calling, faithfully performed, is sowing the seed of a future harvest of some kind, and sometimes better than we dreamed of. . . .

CHAPTER XXXIV

Visit to Paris, Milton Days, Etc. 1887–1888

In April, 1887, my father and mother went abroad to spend a few weeks in Paris with my sister and her husband. It was twenty years since they had been across the water together, and they looked forward to the trip with a sort of youthful enthusiasm. My father writes in a letter of March 23, 1887, to my sister:—

I have neglected you, but could not help it. Your mother and I have long consultations now. We seem to be just married. We look forward to a superior peace in our secret hole of a state-room next Saturday week; all our work laid aside; friends and acquaintances, beggars and parasites, creditors and debtors, teachers and scholars, anxieties, responsibilities, efforts and struggles—all left on shore—and we alone together at sea, with our two hearts within and God o'erhead—for at least twelve days. Then—she says with glee—"you will show me Antwerp, and the Christ in the St. André's church." Then she flits in imagination to Paris and her face shines with pure happiness and the thoughts of days with you.

. . . Lesquereux writes me a sweet, affectionate, piteous old man's letter. I am reading proof of the galleys of his beautiful memoir on the *time distribution* of Palæozoic plants, to go into Rept. Ann. 1886.

Philadelphia, *March* 13, 1887. Peter Lesley to his Wife.

After breakfast I wrote a few pages on immortality as viewed by men of Science and mailed it to Mr. Barrows.*

March 29, 1887. Peter Lesley to his daughter Mary.

. . . I am in a whirlwind of preparations,—trunks—money—passports—back letters to write—Sélikovitch's lecture to in-

* "Science and Immortality." The *Christian Register* Symposium, 1887.

troduce—*Q Q Q* to draw for him—Lesquereux's charming history of Palæozoic plant development to read in galley and correct—dictation of No. VI. to O. B. Harden—insertion of sections on corrected typewritten MS.—letters of inquiry from all parts of the U.S. about capital for iron, coal, gold, nickel mines. . . .

Well, at noon Saturday a great calm will succeed the storm. The guilty pair will have made good their elopement. . . .

They sailed in the steamer "Waesland," April 2 (?), 1887, for Antwerp.* Of their foreign letters I give only two small extracts:—

April 10, 1887. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Thursday, my birthday, was the last time I wrote, and there has not been anything worth recording since then. But that was a wonderful evening, and the elements celebrated the birthday in a marvellous manner. The captain said such a sight is not seen in years. The moon rose full and high in the heavens, the wind went down, and left the surface of the ocean dark and smooth as glass. Then all over the surface appeared reflections like globes of light dropping down. These lasted for an hour when a light wind stirred the surface, and it seemed as if pails full of smaller gems were thrown down by every wave. It was a beautiful sight, one never to be forgotten. . . .

S.S. WESTERNLAND, *May* 22, 1887. PETER LESLEY TO HIS DAUGHTER AND SON-IN-LAW M. AND H.

. . . I refused to feel sad at parting from you. I could not feel really sad when you were so perfectly happy in your life. But I was with you all day; and tried to follow you in thought back to Paris, to Mélie and your little dinner table in the studio and the couch under the curtain. I thought much of dear J. also, who seemed more touched by our departure than I desired to see her. She must learn to take meetings and partings as if they were breakfasts and dinners. There are no partings for those who love each other. As Paul said of his seeing Christ —"whether in the body or out of the body I cannot say"—it makes little difference to immortal souls encased in heavy bodies.

* Just before they sailed for Europe, a letter from Warrington Smyth, of London, announced to my father that he had been elected a foreign member of the Geological Society of London, "an honor [my mother writes] only accorded to two other foreign members."

The body can be in only one place at a time, and shifts its places heavily, slowly, often painfully; but the soul flies at a wish or a word from end to end of the universe, and can be in a multitude of cities and countries at one and the same time; at one o'clock in Paris; at five minutes after one in Elmira, St. Paul, Antwerp, Philadelphia, in hell, or in heaven, anywhere, everywhere. . . .

By June 1, 1887, they were at home again, refreshed in body and soul. The Survey Bill meanwhile had passed Senate and House, and the work of the survey could go on without anxiety for another two years.

PHILADELPHIA, *June* 13, 1887. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Miss Morison has copied out my letters from Spain and Italy, 1866–67, and they are interesting, but much less so than I had fancied; they are so hastily written, so fragmentary, and leave out so many incidents which I still remember. It amuses me to notice that I anticipate ineffaceable recollections of many scenes and groups of objects, the memory of which has been completely obliterated. No one can tell just what he will and will not be able to retain in mind. Passing events of the most impressive character slip into oblivion—accidental details of no moment catch in cracks of the brain and stick there to all time, like the boulder in the Flume of the White Mountains. Memory is one of the profoundest mysteries.

Perhaps the most urgent distress which the loss of my income will give me is the ridiculous reflection that I shall never be able to publish my personal adventures—for every book I print privately costs me hundreds of dollars. . . .

PHILADELPHIA, *July* 6, 1887. PETER LESLEY TO HIS WIFE.

. . . I finished my Article for the *Forum* * yesterday. It makes just 2000 words. Of course it does not quite please me; but it is a fresh train of thought; very suggestive for different kinds of readers, and perfectly unconventional; perhaps too much so; too free, perhaps. But why should we all wear swaddling-clothes from birth to death? Did any prophet ever take thought of what he was to say? . . .

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* *Forum*, January, 1888. "Shall we call him Master?" By Professor J. Peter Lesley.

July 30, 1887. To his Wife.

[Very warm season.] . . . The last time we had such a season was in 1876, eleven years ago; just the sun spot cycle; that is curious; but it doesn't matter either; we must bear and forbear, —as our forbears had to do; and as little bears, like Lesley and Meg, will have to do when they are called to celebrate their series of Centennials, and write Summaries, and make contracts, and be exiled from Milton to Philadelphia in July. What bothers me is to comprehend the continuance of our present mode of packing one or two million people into a brick box, and roasting them all together; instead of scattering them over a breezy landscape, full of trees and birds.

Do you think, my dear, that this sort of thing is a *permanent* arrangement of Providence, for the good of the human race? They call it the progress of civilization; I call it the progress of the car of Juggernaut. It is worth considering, that nine-tenths of the *great* men and women of the ages have been born in hamlets and villages and small towns. Cities breed *celebrities* and *nabobs* and *criminals;* a crop which pays well, but does not furnish wholesome food, to nourish the future.

If I had my way, I should appropriate $100,000 a year to your Children's Aid Society, on condition that you should put all children into country homes, under contract never to let them come back to Philadelphia, except for an occasional visit.

If I had a Jinn's capacity, I should pick up the University of Pennsylvania buildings, the almshouse and *all* the Institutions, in the night, while their inmates were asleep, and set them down, here and there, within a radius of thirty miles' distance. But what a row it would make in the morning papers!

The next best plan would be to strike them all with lightning, and blow them to pieces with a tornado. That would please the gentle Herr Most, and his amiable fellow philanthropists. . . .

It has suddenly grown dark, Sindbad looks up and sees a roc. Soon it will thunder; but it will do no good; it is all blank cartridge practice this year. I believe that the God of the west wind has gone on a long visit to his Ethiopian friends—or rather on an expedition to discover something more around the North Pole. What a dreadful thing for the progress of Republican ideas it would be to have a return of the climate of the Eocene Tertiary age! Figs and grapes and magnolias cultivated all around Hudson Bay and in Greenland, Finland and Alaska; the Delaware full of crocodiles and hippopotami; lions and tigers at Cornell and Harvard; and canebrakes up and down the valley of the St. Law-

rence! as plentiful as they were in the coal age all through Nova Scotia and Cape Breton.

That would soon settle the contest between Sherman and Blaine; and stop the deluge of northern capital now flooding the Gulf States.

July 31, 1887. PETER LESLEY TO HIS DAUGHTER AND SON M. AND H.

. . . What a day this would be for the worship of Mithras! And what an odd sensation it gives one to think that Zoroaster died four thousand years ago! The things and people B.C. are all like Devonian fossil forms, only the shells, often only the cast of the shells, of which we have an opportunity to study—a few of them—while their internal organization, their true character as living things, is hopelessly lost to view.

I read yesterday the Third part of Mr. Gladstone's articles on the Olympian Gods of Homer, in the *XIX. Century Review* It treats of Athene. The old man was never more vigorous.

Sir Grant Duff's review of the changes in English opinion and conduct during the last six years of his absence in India, is also very interesting. Mivart has a defence of the Catholic attitude towards Science.

This admirable literature is profoundly discouraging. I had to look over back pages of my Summary yesterday. Alas the style! Alas the *lacunæ!* Alas the prolixity, the needful revisions, the awful proof-readings, the multitudinous illustrations to be made! . . .

MILTON, *Sep.* 5, 1887.

. . . You can have no idea, my children, how our lives, your mother's and mine, consist in the perpetual sunlight which shines upon you. We eat and drink our love for you. A letter from you brightens the dullest day. We share in all your joys, and would share all your sorrows if you had them. And it will be more and more true as our lives shorten and our interests in the world fall away; like as dead branches on old trees are snapped off by the winds, or drop by their own mere weight.

But while emotions become less lively and sentiments stiffen into unchangeable habits of feeling, the power—the wish—to give them utterance declines, and it happens to a man, what has happened to the planet on which he lives. Once, in its youth and middle life, its surface as well as its centre was white-hot and irradiated surrounding space; all other worlds saw its sunshine and talked with it on equal terms. Now it is covered with a crust,

through which the still fierce inner fires find no expression; and all it can say to the outside world, it says in an almost silent moonshine.

This is the gentle love radiance of parents to grown up children, with which they must perforce be satisfied, and believe that it is the outside substitute for what still continues to be, unexpressed but fervent as ever. How different from the burning, shining, streaming forth without stint or stay of the love of young mothers and fathers for their babies! How inexhaustible is their devotion, how unconquerable their patience, how intensely fond their caresses, how unconcealed and flagrant their pride in the little phenomena, what curiosity—never satiated by what happens night and day, how sweet the music even of their wails, how angelic their naughtinesses, how precocious their absurdities,—oh, I remember it all thirty years ago, and I see it all every day here under the walnuts. . . .

MILTON, *Oct.* 2, 1887. PETER LESLEY TO HIS SON-IN-LAW HENRY (in Florence).

. . . Luxury? Yes, I should think so. I see you setting up your clay in a royal vault. I see Meg mounted on her throne at the parlor window, watching the city gate for your appearance. I hear Julia telling tales like Othello to Desdemona. I walk with you through the Pitti gallery, and show you my favorite pictures, and find out yours. I take you to the north transept of Santa Croce, and show you the monument to Melloni, the wizard who taught the world to measure the moon's heat with a mariner's needle. All this and much more in imagination—next spring *in propria persona,* God willing.

They are blasting the beautiful glaciated rocks* on the opposite side of the road. Every roar goes to my heart more than through my ears. The Browns had dug down and filled up and carted off and sodded over until the two superb turtle-backs of *roche moutonnée* stood forth in all their perfection, with striæ on

* This was a large mass of flat embedded rock on the roadside, opposite to the Walnuts. It was covered with glacial grooves and scratches most clearly to be seen. My father delighted in it, and liked to climb upon it, and examine its surface, while he smoked a reflective pipe. He was much chagrined when he found that the town fathers had ruthlessly decided to break it up, in order to widen the road. They did indeed with unexpected consideration offer to let him have the top surface if it could be separated; but he did not care for it as a specimen, but only as an evidence, *in situ,* of the passage of an ice river over the surface at that point.

all their faces, and the most exasperatingly lovely little sandflow sections in full view. Now the town workmen are drilling them and blasting away, until little or nothing will be left of a group of Nature's sculpturing far finer than the Perseus of the Loggia, or the Niobe of the Uffizi; perhaps I should say instead, the Hercules at the end of the corridor. The story is pitiful—they have treated them as the heathen treated the virgin martyrs—first stripping them naked to show their loveliness and then letting loose the wild animals to tear them in pieces.

. . . In your turn, be a true King to your Queen, and see that she paints nothing which is not *beautiful*. The world wants *beauty;* not reality, for reality is mean as often as it is noble; fragmentary, distorted, spoiled, as often as it is fine and handsome; suggestive of low ideas oftener than of high thoughts. The world *always needs lifting;* and nothing but the best goodness can lift it out of its immorality; nothing but the best beauty can lift it out of its vulgarity. Every artist should be full of the God of missions, zealous to play the revealing angel to mankind; every statue should represent a prophet, saint, hero, or gentleman. These four heads cover the four chapters of allowable effigies. What a profound effect is that which the old Kaiser's appearance at the window every morning and evening makes on the people of Berlin! Such an effect would be made, if all London, moving along the Strand every day, saw the Moses, or the Lorenzo, sitting on a pedestal in open air at the edge of Trafalgar Square. Men imbibe fine sentiments and just ideas, only if they be immersed in them; as plants imbibe carbonic acid from the air, and fish, oxygen from the water in which they swim. Artists are born to charge the social atmosphere with *beauty* (not of technical skill, but of organic growth, character, spirit) as volcanoes are created in the crust of the earth, to supply the craving need of the plant creation.

Can an artist ever so forget his native heaven as to forget that only things of real beauty should be made immortal? The commonplace is a joy; but a thing of beauty is a joy—forever. It seems to me most writers occupy themselves in describing the loves and quarrels of wasps and larvæ, spiders and flies, hawks and owls and field mice; that most painters choose loaves of bread, dungheaps and stable puddles, door-knockers, and rat-traps for models, and trust to high art coming in with the varnish they put on them. Door-knobs are not to be despised as private studies—for a canvas to represent "I stand at the door and knock, he that openeth, etc.," will show the hand of the Christ

on the handle of the door of the heart, and the handle should be as well painted as the hand. But why should so many canvases be framed for exhibition in the salons, on which one can see nothing but the door-knocker, gorgeously ornamental, quaint, and interesting enough, but can nowhere see the divine fingers that should make the invitation music with it? Why should I paint a girl because she is a real girl, if she be not also a *permanent angel* (either cherub or seraph) or fairy (either Titania herself, or Ariel), seeing that my painting is to be *permanent.* A newspaper leader, or reporters' twaddle may be forgiven because to-morrow it will be forgotten; but we conduct Emerson and Macaulay to their thrones, because they wrote essays to be read by future generations, with a choice of the noblest, *most* beautiful, and most immortal subjects, on which they could lavish all the resources of thought and fancy; exhausting themselves to better their fellow-men.

Dare the highest; do the best;
Not for taste, capricious pleasure,
Public fame or private treasure,
But to shine on east and west.
With its drums, and flags unfurled
Let the transient pass and perish;
Facts forget; the ideal cherish;
Give the immortal to the world.
Things have life sufficient for them;
Short their day; as insects dance,
Thwart the golden sunbeam glance,
Like the myriad mites that bore them.
Ideas cloak themselves in things,
As the soul its body fashions;
Paint not faces; paint their passions;
Scorn the ermine, carving Kings.
Artist friend! be wise and just,
Life is law and truth and duty.
Service give to perfect beauty.
Why immortalize the dust?
Chinking coin and flattering smile
Earth with worthless art encumber;
Make the tree distill its amber
To embalm the ephemeral vile;
Turn the artist's heart to clay;
Fill with ghosts the heavenly vision;

Tune his dance to dull precision;
Spoil the work, and end the play.
Wake, O makers, poets, gods;
From your sleep of commonplaces;
Fill our world with loves and graces,
Stars for candles, gems for clods;
Great creations of the soul;
Hero form; heroic story;
Open all the gates of glory;
Paint for Time, and for the Whole.

Dear boy, these are my sentiments and yours; born in us and nurtured by our surroundings. They are the bars of the music which the resident deity in us has written for us to sing by. I hate the baser music of the street and the technical school. The street scoffs at the Old Masters; the school superciliously criticises their handiwork. I revere their spirit, and am profoundly grateful to them for endowing the world with lasting representations of most monitory ideas. With all its shortcomings, a great picture or statue gallery is one of the perpetual blessings, affecting beneficially generation after generation of men, and keeping alive in the always sliding, stumbling and falling heart of society the great truths of virility, stability, noble endeavor, and beauty of expression. These old masters were an army of martyrs in a true sense of the term, although not always (but yet sometimes) in the common meaning of it. I envy him or her who can so live as to become one of this grand army of past martyrs. But to do so, one must suffer and toil. One must fail and then succeed. One must live by faith more than by sight. One must be a chemist of the soul—of the ideal underneath all form—be able to elicit the hidden elements of pure worth and beauty from the rough mass of its realization in matter or common life. One must in a word not paint the outside, but the inside of all objects; not the face, but its passions; and always *add* to what the world sees that indispensable better possible something which the artist sees, or ought to see. . . .

MILTON, *Oct.* 24, 1887. SUSAN I. LESLEY TO HER SON-IN-LAW HENRY.

. . . Enclosed I send to you an article from the November *Atlantic* which opens the Number, and from the pen of a lady, whom I never saw; but your father is so delighted with it, I thought you and Margaret ought to have it. . . . I have as much pleasure in Miss Preston's admiration of my dear Mother, as

you artists can have when your presentations of a fine subject meet with approbation.* . . .

The same letter tells of my father's pleasure in calling on two old parishioners, David Tucker and Rachel Reed. He seldom had time for such calls, but I am sure one of his great pleasures in Milton was its connection with his early life, and the sense that there were still some of the old group of friends around him there.

MILTON, *Oct.* 25, 1887. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I have been feasting my eyes from the end nursery window with the rising sun, lighting up the amphitheatre of trees of variously fading hues, and now and then picking out some beauteous tree of deep, dark orange-brown, to gild with especial splendor. I had had my cup of tea before—and so could sit down for fifteen minutes and take in all the beauty. I never dreamed that in my age, I should come back to dear old Milton and have my fill of all these lovely things, and have all my early love of Nature come back to me glorified. . . .

MILTON, *Nov.* 4, 1887. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I walked in the woods after breakfast to pick out the most perfect evergreen trees, and plan how they could be protected and permitted to grow undeformed by the scrubs around them. It flashed upon me that this was the explanation we sought last evening, when Katie Delano, Elizabeth Rogers, Fanny Brewer, your mother and I wondered whether there were as many remarkable characters now as fifty years ago,—or not. No, how can there be? When society is sparse and loosely aggregated, each individual has free space to develop his or her own special form; but in a crowded population, men and women press so closely on each other, each struggling for light and air and soil, they interfere and thrust each other's branches of character into the forms of convenience, not of natural development. They get interlocked, half blown, crooked and lean.

Happy you in the wide west, who can make natural lives for yourselves, and full formed, beautiful and noble characters. God's light and love will suffice for each and all of you. . . .

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* "A Lady of the Old School." By Miss Preston. *Atlantic Monthly*, November, 1887.

Nov. 11, 1887. PETER LESLEY TO HIS DAUGHTER AND SON M. AND H.

[After the birth of their first child:] . . . Your new plaything is such a royal gift that all the old mere mortal ones are probably for the time forgotten. What is the dome of the cathedral in comparison with the little head with its floss of thistle-down; or all the statues in Italy to the little living form; or the most exquisite painting in the Pitti gallery, to the tints and texture of its soft little flesh; or the best music, to any one little sob or sigh or sneeze? I wish I could hear it sneeze. A few days old baby's sneeze is a more miraculous phenomenon for me than a flaming, roaring gas well, or a volcano in full eruption, or the ocean in a storm, or the leafing of the country in April. Do it again, I cry—*Do* do it again, will you, you tiny parody on heaven and earth combined—*How* do you do it, you little bottle of Elixir Vitæ? Who taught you that? What do you do it *for?* Where is your dynamite factory? Everything else a baby does seems natural in comparison with a sneeze. It is as if a mountain was cracking a nut, such preparation, such earnest solemnity, such a huge endeavor, such a ridiculous result. Mother murmurs "poor little dear." Nurse remonstrates "it is catching cold." Father laughs proudly, as if his baby was the only one on earth that could do that sort of thing.

MILTON, *Nov.* 12, 1887. PETER LESLEY TO THE SAME.

. . . The mother will have expatiated to you—I cannot. I can only say that the landscape is more beautiful, the sunlight warmer and more brilliant, my children dearer and more precious and more lovable and admirable—if that were possible; certainly life much richer, more peaceful, more delicately colored, flavored more exquisitely than ever. Grandchildren are a golden precipitate in the beaker glass of its chemistry. Life begins as a perfunctory laboratory experiment, and ends in a poetic generalization.

It is a mistake to say that poetry is married to youth, like Cupid to Psyche. The true poet is the old man, who has seen everything, tried everything, felt every emotion, drunk the wine of many vintages, travelled through many valleys and stood on many peaks, until the beauties of heat and cold, light and darkness, land and sea, have photographed themselves in the album of his memory, and arranged the full score of a divine opera for the whole orchestra of his nature. Every commonplace fact

has been sublimated for him into a symbol. The universe resounds with concerted music. The difference between space and infinity, time and eternity has vanished; yea, the difference between the real and the ideal, the material world and the great spirit which has evoked it from his own thoughts. The poet is created when he sees God everywhere in everything. Man shall not be excused for growing old; his proper function is to grow poetical; and the very essence of the poetical is benevolence. It is beautiful to see in the lives of Emerson and Longfellow how lovely and lovable they grew as they became old. They ceased to write; but when their words fell away from them, it was like the shedding of the leaves in autumn, leaving the marvellously beautiful forms of the trees in full view against the evening sky.

As we rode along Milton Hill the other evening from dining with the Delanos at John Forbes', to dine with Emma Ware at Edward Cary's, we saw with apprehension the woods of Blue Hill on fire. It had been a long drought; and I trembled for our home under the Walnuts; although practically the danger was still as distant as an insurrection in Germany would be to the United States. But fire is an awful threat, when it gets headway, and there is no water. It burned two nights and a day; then the south wind brought rain, and the wood fires were extinguished. Nature discomposes and composes mankind alternately; it is the discipline of patience and Faith in a stable order of things. No danger is quite inevitable, no evil is quite irremediable. The wounds of the world always heal; and even their scars disappear in the lapse of time. And a single man's life is but an epitome of the history of the world. If only each of us had as sound and healthy a bodily and mental constitution as the world's! They that are born well should be infinitely thankful. . . .

MILTON, *Nov.* 14, 1887. PETER LESLEY TO HIS DAUGHTER MARY.

. . . Among other byplay, I have just mailed a long article to the *Forum*, entitled "Shall we call him Master?" I have also tried to finish a poem which I commenced last spring. What fun it must be to be a poet—when one is a poet. There is nothing I should enjoy more—except being a world-entrancing romancer. A novel is the highest goal of a modern thinker's ambition. But, alas! who can write a novel—now that Walter Scott is dead. Nevertheless—I am enjoying reading to your dear mother Pater's wonderful *half*-novel of "Marius the Epicurean." Charles

and you would gloat over it. But I warn you—it will task all your powers of thought. It is pemmican, and you must guard your digestion. But in that little volume you have a score. It is an ostrich egg for meat. But it will teach you more about Aurelius, and Apuleius and Flavian and Lucian and Lucretius than you ever imagined. It is a long pageant of mental and moral development. Discusses charmingly all the vital tracts of philosophical history and religion.

Meanwhile I go on with the fourth and last volume of "Le Bible Vigouroux," and have got as far as Omri and Salmanezar II., and the Stele of Mesa, with the beginning of the older prophets. . . .

MILTON, *Nov.* 25, 1887. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . I pine for my gossipy, friendly, fresh little grandchildren. Lesley might perhaps, if I were there, "rush to these arms." I don't know if he remembers me; but that is of no consequence; since it is so easy to re-establish friendly relations with nice children; and a boy learns over and over again (and in a ten minutes), when he has a heart and a hand offered for his acceptance. Next summer I shall be his hourly slave. What fun it will be to take his mind by the hand for a walk in some direction through nature, or art! I lay awake last night with a bright idea how I should teach him decimals. I am sure that any bright child of four years could be taught the Arabic ciphers in half an hour; and why the same ciphers are used with different values in the different columns of figures, by merely showing him that when 1 is placed in one column it stands for one thing, and when placed in another it stands for one group of ten things, or one group of 100 or 1000 things. . . .

. . . I am charmed that Margaret bids fair to be fond of long words. It is a strong barrier against the inroads of the commonplace. It goes with personal dignity and a certain elevation of sentiment and breadth of thinking. I find occasion now and then to take a dose of Milton and Pope to purge my liver of a plethora of short words. To escape from newspaper literature into the pages of Gibbon and Ritter is as invigorating as a summer journey to the White Hills. I read the newspaper for mental rest—just as I take a voyage on the monotonous sea where no one need, or indeed can, think. The ship carries you along like an editorial, without the least strain on your muscles or nerves. You reach port—you throw down the journal—and go to work again.

I positively regret to leave this place. It has grown to be a

lovely home. Since the trees have shed their foliage, new and wider landscapes are visible, especially from the upper windows. (It is the *upper* windows of the soul also, from which alone we can descry the large and finely beautiful.) Every soul should be at least a three-story-high house; kitchen and workshop on the ground floor; truth and love *au premier;* and the study and studio near the roof. A balcony of enthusiasm and a belvedere of religion will make it all complete. . . .

PHILADELPHIA, *Dec.* 4, 1887. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . Then when once one stops work, one feels at first so queer, and then so serene, that it demands great moral courage to recommence. But the coming week will see me hard at the fish beds again. I am just now however correcting the MSS. of Winslow, for part four of the Annual of 1886.

By the way the *Forum* sent me yesterday $100 for my article on "Shall we call him Master?" which I advised them not to accept, as it was not worth reading. I have read and returned proof, and therefore suppose that it will appear as the first article in the January Number. I shall mail you a copy as soon as it appears. I am pleased—because I see that it will be a possible source of *succedaneum* to my income when I lose my salary in 1889. I shall therefore cultivate the magazine a little next year. And it is great fun. But I feel guilty in saying so; for it is a serious responsibility one assumes—to speak to even a small fraction of society. One may do so much harm—one may do some little good. Surely the money motive must be watched and repressed as much as possible. I remember well how it ground my soul to take pay for preaching in old times. But after all we are water pipes—and the water is money—and it flows with a rush all the time. Money is like petroleum too,—some of it stinks badly—some of it has the delicious smell of naphtha. It depends on its origin. The fetid was made of decomposed fish—the odoriferous, of decomposed water lilies. I sometimes fancy that dirty coin has passed through thievish hands; and clean bright coin, through benevolent hands. But they all lie mixed together in your pocket, just like the sinners and saints in a city, or a church, or a family. Well, it is a strange, wonderful, good world.

Have you seen Huxley's onslaught on the Duke of Argyle in the *XIX. Century?* It is delightful reading. He begins by praising the three bishops of Manchester, Carlisle and Bedford; then tears to pieces a fourth anonymous bishop; then suddenly leaps on the

Duke and knocks him down, and tramples on him, and rolls over him, and stones him to death,—with such a rollicking dare-devil legerdemain that there is nothing left of the titled humbug. . . .

PHILADELPHIA, *Christmas*, 1887. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

[On receiving a new Atlas from him.] . . . The way of the transgressor is hard, especially when his punishment falls upon him with the weight of a Bradley's Atlas. A very magnificent book; a very handsome Christmas present, much in excess of my deserts, its own deserts making such a tremendous show that mine are quite lost among them. For a long time past I have neglected you—and now, with a splendid magnanimity, you bestow on me what Hadrian could not have bestowed on Antinous—the whole world. It is odd to reflect that the man who could erect a castle of St. Angelo for his tomb, could not buy a universal atlas, nor even afford a ride in a street-car if he wanted to dine with his brother-in-law in Mt. Vernon Street, on time, and yet write a page or two to his son-in-law in St. Paul, before going.

My dear Charles you could not have selected so acceptable a present if you had ransacked the bazaars of Constantinople. My only atlas is of date about 1840, since when the Western world has been to Wanamaker's, and bought a completely new suit of clothes—at what a fabulous cost!

My first trial of my new possession was the map of Ireland, . . . quite a coincidence; for Susan I. Lesley marched me off to Chestnut Street yesterday and indued me in an ulster. Not so comfortable a one as that one (four years old) which I left on board the Rhynland last spring; but no doubt it will equal its predecessor when it gets to the same age of venerable decrepitude and disregard of appearances. In the latter respect however, it will never be able to rival its geographical namesake.

How still the Christmas city is! Our girls rose at four and heard mass at five! I went to the P.O. at quarter of ten and got your letter. Ah, there goes rumbling by an Adams Express Wagon —empty. It is certainly Christmas Day. You will celebrate it by enthroning Mary in an arm-chair. I can imagine the children's delight. I wish I had them both sitting on my knees this moment. It is sometimes rather lonely here. Darby and Joan make the best of each other, but a little human locomotive whistle now and then would be a relief. If the strike on the Reading road, following the long strike on the Lehigh, should empty the

coal yards, we shall be forced to emigrate to St. Paul to escape from freezing to death. They talk of savages living habitually from hand to mouth—we civilized live habitually from coal yard to cellar bin. If strikes are to be the order of the future, the citizens of every block will have to devote one lot to a common coal pile, which may last round the year.

Have you seen *Punch's* cartoon of Cleveland introducing Miss Freetrade to Madame Columbia? The N.Y. Sunday *Tribune* to-day reproduces it on its first page; with *Punch's* poem, "English, you know," under it. If it be extensively copied, *Punch* will get the credit of overthrowing the Democratic government next year.

It is so still that I forgot that Sunday had gone by. How these holidays upset one's habits! . . .

PHILADELPHIA, *Jan.* 1, 1888. PETER LESLEY TO HIS DAUGHTER AND SON M. AND C.

She (Mother) is to read something on Prayer next Wednesday; so I looked up references before supper, and it resulted in her finding her Fénelon (a birthday present when she was sweet seventeen), and she read aloud to me the good Archbishop's sermon on prayer to see how it would do. Surely no one can read or listen to it without emotion and edification. . . .

PHILADELPHIA, *Jan.* 2, 1888. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Then I came home and rested, for I had to go out in the evening to address a large meeting of Presbyterian women in the vestry of the First Church in Washington Square. There are 101 hard-working women who have attended the same Mothers' meeting for 25 years, and all belong to that church. They every year at Christmas time bring a little offering in their little closed envelopes, and ask their teachers, Mrs. Perkins and Miss Meta Paul, to give them to the cause of some who are poorer than themselves. So every year, these ladies hunt up some good cause to recommend to the class. And this year, seeing my name as one of Helen Jenks's counsellors in the District or Visiting Nurse Society, these ladies came to urge me to come to this meeting before the women handed in their offerings, and describe to them the workings of this Charity. I had great joy in doing it, and the goodness and intelligence of the women was very striking. Many of them came up and thanked me, and told the

ladies they all wanted their offering to go to the Visiting Nurses, but wanted them to wait till next week before they sent it, as some of their number were unavoidably absent. Then we all sang Moody and Sankey hymns, and the good minister Dr. Baker prayed very earnestly for the Visiting Nurse Society, and we shook hands all round, and I walked home alone. . . .

PHILADELPHIA *Feb.* 20, 1888. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

[She writes concerning her daughter's anxieties over the management of her little daughter:] You say you have heart-searchings over her management. So does every mother. The first baby is a great experiment. But every month now, you will be gaining confidence, and I don't believe you can ruin her. I thought I should spoil you and Mary, but other things come in to hinder a mother from that—its good inheritances—its growing reason—this beautiful world, and all the love it is in possession of. A hundred influences besides our own. And we too are getting educated as the months and years go by, along with the little ones we are guiding. Have faith and hope, my child—all will be well with the little Lydia. . . .

ST. PAUL *March* 6, 1888. SUSAN I. LESLEY TO HER HUSBAND.

[When she was visiting her Western children.] . . . Much of the afternoon I held the baby [3½ months old] and talked to her, which she evidently liked.—She looks preternaturally wise when I say to her—"Now, Catharine, Beauty is all very well, but hear what the great Emerson says, 'A beautiful form is better than a beautiful face, but a beautiful behavior is better than either,'" and she smiles responsively, attracted by the grave intonations, more than by the sentiment. . . .

PHILADELPHIA, *Sunday, March* 11, 1888. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . Just as I was sitting down to tea, still another Firenze postmark was handed to me. I was a happy man; but still, nevertheless, notwithstanding, in spite of all my blessings a lonely discontented mortal. For this impossibility which carnal nature imposes—of not being in more than one place at a time—do we not share it with the metals, and woods, and beasts? Will the Darwinites pretend that it was the striving to overcome this law of matter, that generated the human imagination by which

our souls leap across the oceans in a moment, and back again in another, under pretence of being in Florence, Philadelphia and St. Paul, all three at once? Or is this imagination a half-realized prediction of the ubiquity of the disembodied soul,—an object-lesson to teach us that with God there is neither distance nor time? To "be with God" therefore, will it be for us—ubiquity? That cannot comport with the special and successive attentions we give to objects and events. But if God, unlike us, sees all, attends to all, comprehends all things and their actions, causes and consequences at once, he must have an infinite number of eyes, ears, brains to do it with. Then he is not a unit, but composite. Then polytheism is a nearer philosophy to the truth than monotheism. Thus we sail on the ocean of conjecture. But who can expect to "know God unto perfection"? . . .

And that is why our science of Nature is so superficial, and we stop at the first stage of our explorations; for God is Nature, and Nature is God; and he dwells in darkness; and to him it is light; for he knows himself.

For Man the only use of the brain is to feed the heart. The last civilization reaches an absolute self-sacrifice. All we learn to know and to do is laid at the feet of the world. Man learns to worship by first worshipping himself; then his faculties; then his lovers; then the miserable; then the whole, and so, God.

So, when one has lived long enough to be sure that he can live alone and do without anything, he is able to say I own nothing—take what you need. It is a great lesson—that deathbed of Kaiser Wilhelm, the other day; for he had evidently ceased for some years to be a man, and had become the nation. His bedchamber had in it nothing but a washstand and a writing-desk. It was a great revelation to the modern world of self-indulgents,—the greatest monarch of Europe dying of no disease, and thinking of nothing but his people's welfare. No courtesans, no priests, no heirs, no sycophants—only Germany present to wish him a farewell,—and all Europe, at a distance, saying God bless you, you have done your best.

CHAPTER XXXV

Visit to Florence and Switzerland. 1888–1889

In April, 1888, my mother and father sailed for Europe in the "Waesland," to spend a few weeks in Florence with their daughter Margaret. She with her family was established in a lofty apartment just outside and opposite the old Porta Romana, from whose windows was a wide view over the city and the surrounding hills.

Early in June my father returned home; but my mother remained until late in the autumn, spending the summer in Switzerland with her daughter.

My father's most absorbing work this summer and for some months later was the preparation of a Fossil Dictionary in three volumes, in which he took the greatest delight. Mr. Lyman, in his biographical notice, says of it that it "contains illustrations of all the known fossils of Pennsylvania except the flora, already reported upon by Lesquereux and Fontaine. This is a handy reproduction of an immense number of fossil figures gathered together from many widely scattered sources which are carefully referred to; in many cases, sources that are out of print and difficultly accessible, and in some instances rare."

My father took the materials for the Fossil Dictionary with him to Florence, where my mother writes of his working "uninterruptedly five or six hours of every day."

In the autumn of 1888 their old friend James Freeman Clarke died. This was a real sorrow to them. It was also the cause of another heavy trial, for their friend and brother Charles G. Ames was chosen to succeed Dr. Clarke as pastor of the Church of the Disciples in Boston; and Mr. Ames after serious consideration decided to accept the new charge. His people in Philadelphia were much afflicted.

The Johnstown flood at the end of May, 1889, brought a mass of extra work upon the Children's Aid Society. They

at once sent one of their most efficient members—Miss Cornelia Hancock—to organize the work of rescue and attendance, which she carried out with great success. Miss Helen Hinckley also went to the scene of the disaster, and devoted herself to the same good work. My mother at once wrote a number of letters telling the need of money for the care of the survivors, and was, as usual, able to raise quite a considerable sum.

October 16, 1889, my mother went to Altoona, to read her paper before the combined Children's Aid Society and Guardians of the Poor,—"The Family System a Cure for Pauperism."

In February the death of his brother Joseph Lesley was a great loss to my father. From boyhood they had had constant and intimate intercourse. Their opinions and tastes were much the same, so that, in spite of the fourteen years of difference in their ages, there was a congenial intimacy between them of the closest kind. Uncle Joseph had at one time been an aid to my father in his geological work, and was a very fine draftsman and an intelligent geologist.

Joseph Lesley was in 1858 and 1859 an assistant on the Kentucky Survey, and in 1860 on the Arkansas Survey. Not long after this he became secretary of the Pennsylvania Railroad Company, and held that position for many years, until ill-health obliged him to give up all work. He had a very simple, gentle, and affectionate nature, and my father felt an almost fatherly love for him.

The death of his old Divinity School friend David Trumbull, and of his dear old friend Leo Lesquereux, also occurred in this year. And at the very end of the year Charles Ashburner, one of his most trusted and most talented young aids on the survey, died,—a great grief to him.

FLORENCE, *May* 6, 1888. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . So one evening I went with Father and Meggie next door to see the Miss Horners for an hour, and yesterday we took a beautiful drive to a villa, to hear some lovely music. . . . The Miss Horners are sisters of Lady Lyell, whom Father and I loved

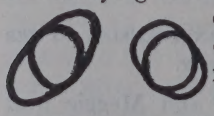
so much, and it was delightful to hear Father reminiscing with them over her and Sir Charles. They are lovely, simple old English women, and remind Meggie and me both somewhat of Miss Harriet and Miss Clementina Smith, the same sweetness and simplicity and friendliness. They told us of Julia Metcalf's being in Florence and father went to hunt her next day, and brought her back to see us. Oh! how glad we were to see her, and she, to see us!

My father returned to America early in June, leaving my mother to spend the summer in Switzerland with her daughter.

ZÜRICH, IN THE CARS FOR STRASSBURG, *May* 24 [*or* 25] 1888.
PETER LESLEY TO HIS WIFE AND DAUGHTER MARGARET.

. . . The interruption has been notable and memorable. I have seen the Escher von der Linth collections arranged by Heim, and the superb specimens of plication by poor Wetstein, who was lost in a climb, lately, a genius of the first stamp; also the models of Heim, before which *ours* are as archaic as Lombard statues to those of Donatello. . . .

In Zürich, Heim, a man of forty, with two children, was all cordiality. He came about 8.30 A.M. to the *Pension*, and by 9 o'clock we were hard at work in the great museum, examining the cases in regular order. Going from window to window, he opened each, and displayed such rare things as he supposed new and useful to me;—soft elastic *Dopplerite*, and the hard kind;—the curious *Seekügel* made only in one eddy, on the shore of one lake, by the felting up of fir needles. (In the winter the boys cut holes in the ice; fork them out, and set them rolling before the wind over the lake ice, for fun.)—All sorts of deformations of strata—crystals—fossils by pressure. At one place he explained how Agassiz had made seven species of an eel, out of the various distorted forms of one species; and how he proved it by getting Wetstein to collect hundreds of specimens (all from one stratum) and studying the stages of deformation. Each specimen had a



on it, to show the direction of pressure, and its calculated quantity.—Here he showed me a remarkable and quite unexplained kind of *tracks*, the ends of which have never been seen. . . .

He has a particularly fine set of *stretched* belemnites, some of them so far gone as to be disguised into mere white streaks, which no geologist who had not seen a series of them would believe to be organic; they look like seams of calcite.

Then he showed me with great pride his typical plications, and the difference between crumpling by *pressure from without* and by *pressure from within* (crystallization, etc.). . . .

Then his models were ravishingly beautiful. Especially his great Glaris double fault model; and the small model of the dreadful *débâcle* of Emau in 1881; where Favre's slate quarrying, being carried too far, brought down the mountain wall, and buried 190 persons and many houses. He showed me how it went like a water stream, and had its moraine and loop structure, like a glacier. He said people at A. *saw under it* when it made its leap across the valley, at B. [Many sketches to illustrate all the above statements, which it was not possible to reproduce.]

My Neapolitan photographer fellow-traveller, from Milan to Zürich, told me all about his trade; that he was the first in Naples thirty years ago; that he now sold for one-half fr. what once cost two fr., but that he sold 100 times as many and made more money. All food and rents had risen 100% in twenty years, etc., etc.

I bought my Zittel (very expensive) in the Polytechnicum, (all the houses of which, and of the University) Heim explained to me, and then at 12.15, having exhausted *me*, but not his *exhibition*, he tucked the heavy Zittel under his arm and trotted me down to the *Pension;* bidding me expect to meet him in London. I had a good send-off after lunch, at 12.30, and found myself shut up in a coupé with a jolly little old antiquarian of Colmar, seventy-five years of age, who asked me if he might smoke, and then from 1.30 to 6 P.M. devoted his whole energies to entertaining me; described the monastery near Baden; the baths; the castle Hapsburg, with stories of Rudolph, Albert and his daughter the queen of Suabia. Showed me the place where the theatre of Augusta *Rauracorum* (Ochst) had been excavated, and fixed up, so that he was present at a Roman play performed in it by the members of the Basle antiquarian society. Pointed out to me two Roman *Milia*, or milestones, set up just on the edge of the ravine, entering Ochst. Told me all about Mühlhausen, the Manchester of Alsace, and introduced to me, on his entrance into the coupé, "one of the chief wool-spinners of our country." Described the way the prehistoric men bored holes in celts with a soft stick and sand, after removing the pith, and then broke off the core bit by bit, just as our diamond-drillers now do. Described the recent finding of mammoth, cave bear, elk, etc., in the talus of a hill cleft back of Colmar, with human instruments all palæolithic. Explained why they were at so high a level above

the Rhine—they lived in the clefts or ravines, when the Rheingau was a great deep lake (as Ramsay has described).

Then he talked of his own life and pursuits (he loves *armour*), and his memory and lack of memory; and of Porrontry, and Désor, and the change in the cost of living and politics, and the good emperor, and the bad socialists, and the extent of the American coal mines, etc., etc., etc. We exchanged cards at Colmar, and parted like two aërolites.

VALLOMBROSA, *May* 25, 1888. SUSAN I. LESLEY TO HER HUSBAND.

. . . How astonished you will be to see the date of this letter! The morning yesterday was glorious, when Meggie took me to the Station, where we found Julia (Metcalf) already there, and we went to *Pontasieve*. There was Fernandino looking out for us with a beautiful open carriage, and we started. We both wore our winter clothes, which was well. Oh! was there ever such a drive since the world was made? I never conceived of anything so beautiful or so varied—it is something to remember for a lifetime. As you and Meggie took this drive, I must not describe it. —What a rare and wonderful place it is! We thought we had never seen anything like the drive through that noble forest. We reached here a half-hour before the twelve o'clock lunch,—were shown to our two beautiful rooms at the West End, and given a little warm parlor on the same floor to sit in. I did no more yesterday.—I went to my room after lunch, and slept three hours, while the enthusiastic Julia roamed about these hills and went into the Monastery and up to the Paradisino, where F. Marion Crawford's family had arrived a week ago. There are only an old Englishman and his two daughters, now in *this house*, besides ourselves, and we never see them except at meals. We dined at six, and afterwards Julia went over to the Monastery to evening service. She came home enchanted with the office, as she called it, and read me the hymn the poor laborers sang. She said it was all so sweet and simple.—I should have gone with her if I could. We went to our little parlor and had a sweet evening. I read aloud to her your *Forum* article, "Shall we call him Master?" and she was most appreciatively interested in it. Then she told me stories of a delightful young Brahmin whom she met several times in Rome this winter, the same one who introduced the Boston Theosophists and Ethical Culturists to the New Testament. She says he was more puzzled with Boston than any place he was ever in,—dumfounded that people who *could* have Christianity should go back on it,—said Buddhism was the only

religion for the East, but the West ought to glory in the rare privilege of Christianity. He thought Boston unusually narrow and *stupid*. She said his own personal character was delightful, such deep and wide learning, united to perfect modesty and simplicity, and great tolerance of everything that is earnest and real, however he might differ. Before we went to bed we looked out of the windows at the full moon—a heavenly night. I slept well and rose refreshed, and so did Julia. . . .

FLORENCE, *May* 31, 1888. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . A half-hour ago, I began to write, but it is a great Fête day in Florence, and I heard sounds that called me to the windows. Here in the Porta Romana, the people assemble in crowds, and I saw beautiful processions of boys in gay colors carrying baskets of flowers, and the road in front of our house and for a long distance is perfectly covered with flowers. We see groups of people walking and talking gaily, and the balconies below us are filled with people awaiting a fine procession which will soon pass. It is the Fête of "Corpus Domini," if you know what that is. I sit by the window and look over the crowds up the beautiful roads leading in every direction up the hills, which are covered with the most exquisite verdure I ever saw—the noblest Cypresses and Magnolias lining the roads, and the walls all covered with vines, the gardens crowded with flowering shrubs and beautiful foliage. It is a sight to see.—And now it is nearly seven o'clock, and the lights and shadows are like something "that never was on sea or land"; and on the top of the hills Galileo's tower and San Miniato look wonderful in the glorified light. I hear a sound of distant music.——

It was the procession, and the prettiest one I ever saw,—first priests in white and black robes—then girl communicants in white robes and gauze veils—women afterwards in gray dresses and white veils—then women entirely in white, and one bearing a banner with Christ upon the Cross—then numbers of tiny girls from four to six years, dressed in blue or pink gauze, with wreaths of roses around their heads, then a Canopy of Gold color, borne aloft, with six prelates on each side bearing it up; and underneath walked the Archbishop in such heavy garments and trappings that he fairly waddled; and on each side of him three dignitaries with similar cumbrous clothes, so that they all swayed from side to side as if they had hard work to carry their clothes. Then came various orders of priests and acolytes, and a few soldiers—and an exquisite band of music. It was all

lovely as a show—a spectacle, except for the little tots who ought to have been in bed, and who were quite too young for such a tramp or such excitement. But as a part of the Christian religion I can't bear it. I kept thinking of Jesus in his seamless robe, and of his entry into Jerusalem—so different. Surely all this pomp and show comes down from an earlier and pagan time, and does not belong to *us*. . . .

ANTWERP, *May* 25, 1888. PETER LESLEY TO HIS WIFE.

. . . If my letter to-day be dull, ascribe it to my having too many things to tell, each one of which might easily induce me to cover half a dozen pages, with either descriptions or reflections—historical, ethnological, topographical and geological. I go in no direction without seeing the universal corellation of these sciences with one another. . . .

You know, I believe in the stability of the French Republic. See a sign of the times, just now. Three hundred and fifty-six chief places, in eighty-six of the departments of France, have held elections. Three hundred and ten have elected *Republican* Mayors and Adjunct Mayors. Only thirty-seven, *Conservative* (Royalist, Bonapartist, Boulangist). The remaining nine gave tie votes, and the government will name for them Republican officers.

How natural scenery, when passed, fades from memory, or falls into a desuetude of interest, and is replaced by the scenery of human life,—an interest ever enduring in the welfare of mankind! I find myself all the time taking the liveliest interest in every person whom I meet, or deal with, in however casual a manner, however low a degree. All are alike objects of reflection, sympathy, benevolence,—the *garçon* as much as the Emperor. There is neither high nor low, great nor mean, rich nor poor, in this kingdom of heaven within us; all are merely and really fellow-men. . . .

Returned to his home, he became immediately immersed in work again.

PHILADELPHIA, *June* 18, 1888. TO HIS WIFE.

. . . What are dead fossils in comparison with living human hearts! And yet fossils are beautiful things all the same. The dream I am dreaming every day about that Cambrian earliest earthly age, surcharged with marvellous shapes of incomprehen-

sible creative life, is a rare, rare dream, fit for an old man's youth. The love of nature, bred of the study of nature, will keep an old man young, or make him young again, if he has forgotten his youth. Praise God for that immortal youthfulness which he has bestowed upon our souls. The soul should never grow old, never die. How can a soul be other than immortal? Every hour of pure joy confirms faith in immortality.

June is the Juno month of all the year's Olympus. What a queenly month! What fulness of luxuriance! What skies! What airs of paradise flow majestically through the heated thoroughfares of the city! I rose as usual at six o'clock, and sat down to my work until breakfast time. This is Chicago convention week. I do not like to think of the great political cauldron seething, steaming, boiling over, scattering its too unclean ingredients about the land, through the daily press. Oh, if patriotism was not so much like tin ore—three per cent. tin in 96 per cent. trash—personal greed, ambition, vanity! Even the great issue—protection—has the false ring of money profit in it. But then, let us reflect that men must live, must support wife and child, pay taxes, provide for old age. Therefore make money—must protect their money interests. Seldom comes a really spiritual crisis to a nation. . . .

PHILADELPHIA, *June* 12, 1888. TO HIS WIFE.

[Hard at work.] . . . Mind at perfect peace. Life happy and home sweet.

June 17th.

My work is so engrossing and exacting that I *must* give it my undivided, undistracted attention. It marches at double-quick step, and is delightful and most interesting and instructive. I am learning a lot of Palæontology which I should have had the mastery of by rights years and years ago. I am actually going to school in my old age and enjoy it as much as I did in my college days.

Speaking of the funeral of their dear friend Mrs. James Furness, he writes:—

Mr. May says that he requested that the funeral service should be left entirely in the Doctor's [Furness] hands, and that it was one of the most beautiful he ever had known. The

old man is well and happy, bright and chatty, showing so little decay of mind, that he quoted from memory a long passage from a speech of Everett fifty years ago, and immediately afterwards another from one of Gladstone's recent reviews! You will see a letter of his in the *Christian Register*, which went to you yesterday, about James Freeman Clarke.

PHILADELPHIA, *June* 19, 1888. TO HIS WIFE.

. . . I send you an exquisite letter from M. How touching the little Margaret's "I a very 'ittle girl, papa!" Children's miseries have always broken my heart. I wonder there is any of it left. But the rents close up, like seams in rock, with all sorts of precious and beautiful mineral veins. When our hearts are shattered, they become like the precious opals, full of magic light and fire, the goodness of heaven being refracted from a thousand invisible flaws. You often talk of the remedial virtues of sorrow—but you must not fail to add its function of beautifying.

. . . I was lazy to-day; did no work before breakfast, although I rose at six; but the *Ledger* was too interesting; first Gladstone's noble speech in eulogy of Kaiser Frederick;—the defeat of Boulangerism in the non-election of Déroulède—but especially the innumerable press reports of doings of persons, city committees, state committees and national committees at Chicago preparatory to the first balloting. To-day the platform will probably be put on foot—an easy matter. As for nomination—you will see by my enclosure of *Ledger* editorial an excellent résumé of the utter confusion which prevails. I am afraid Mr. Blaine is not a straightforward man, or he would send a dozen or a hundred cablegrams to put a stop to it. But perhaps he means to do that at the critical moment, when Sherman gets his maximum of votes and wants an additional boost. What a curious—what a grand sight—this consultation of the representatives of half the 22,000,000 voters of a nation! . . .

Early in June my mother and her daughter, the baby and nurse, sought summer quarters in Switzerland. These they found in a little mountain village in the hills back of Lausanne. The place was quiet and delightful, but the season was unfortunately a wet one, and for nine weeks it rained almost without cessation.

St. Cergues, Pension Capt, *June* 9, 1888.
Susan I. Lesley to her Husband.

. . . The place and people are as quaint and attractive as possible, and we are delighted with our quarters. I wish it were possible for me to describe it. There are perhaps ten dwellings, little stone houses, in two or three of which are a carpenter's shop, a blacksmith's, and another for domestic utensils of necessity—all very small. The houses are huddled together in every kind of catty cornered and picturesque fashion, they are very old and very funny, but so clean and sweet, and covered with vines. The *Pension* Capt is the only building of any size, and that is very primitive in all its arrangements, but exceedingly comfortable, and kept by the nicest and kindest people. We have four rooms all to ourselves, over a little Café next to the *Pension*, as both the *Pension* and the Annex were engaged, every room. We ascend to our rooms by an outside staircase, and think ourselves very fortunate to have this little apartment away from every one else, yet so near; we are as easily found in the dining-room or parlor of the Capt as in our own place. Everything is spotlessly clean—the floors unvarnished pine boards, but scrubbed so that one might eat off them—the beds good, and large bureaux and hanging places. In the kitchen is a little stove, a huge wood-box, filled with wood, and another small box full of kindlings and pine cones. . . .

Philadelphia, *June* 22, 1888. Peter Lesley to his Wife and daughter Margaret.

It is very hot here; but I am in seersucker clothes and quite comfortable, perfectly well, and happy as the *whole* day is long, and sleep from 10 to 4 the sleep of the just; not even dreaming. At 5 o'clock coffee; at 6 begin work; breakfast at 7; paper and writing notes till 8; then the regular pull at my work until 1; dinner; work until 3, 4, 5, as the case may be; take a half-hour's nap about 3. All my old unhappy ennui from 5 to 7 has gone where bad things go.

St. Cergues, *Aug.* 4, 1888. Mother to her daughter Mary.

. . . I have steadily improved in health, ever since I came from Geneva. . . . I take quite a walk with Meg now every day, and yesterday she was very proud of me. We started off after our afternoon naps, well protected, to go to the Châlet where the dairy is, about three-quarters of a mile from here, and over a very rough forest road. It rained hard, but still it was beau-

tiful in the woods. When we got to the open field where the Châlet was, the beautiful cows were all around, but very gentle and glad to see us. The Châlet was a great spreading low stone building, without any floor, one-half occupied with superior cows, and men milking them, and the other half as weird and picturesque as anything you can imagine. Great cauldrons were swung on pivots from beams, and underneath fagots blazed and illuminated the faces of the rough men who kept coming from the cows with their queer-shaped receptacles, and emptying them through strainers into the vats. The men wore blue blouses with very short full sleeves, like little girls, which only came half-way above the elbow, or less. Great shelves along the walls held the cheese presses. They went for a cup and gave us each a cup of milk, warm from the cow. Meggie takes these tramps every day, through all winds and storms, but I have not been able to go so far before, and that is the reason she was so proud of me. . . . She lets down the bars and replaces them, carries the camp-stool for me to sit down often, and is the best little caretaker, as you know. It won't be her fault, if I don't make a very good appearance, on the arrival of our husbands. . . . [Her son-in-law had gone to America on business, and there was some expectation of my father returning to Paris with him in September.]

Aug. 5, 1888. SUSAN I. LESLEY TO HER HUSBAND.

Yesterday was our first day of sunshine since we came to St. Cergues, early in June. We were elated,—we said, it is the beginning of good weather. Margaret set her palette, and I promised to walk with her in the afternoon—we were all delighted. After her successful painting she came to dinner, we rested, and taking our Alpenstocks and calling on the Danish lady to accompany us, we started for the Hill of the Old Château. I never performed such a feat of climbing before. But by sitting down often for ten minutes or so, I reached the top, and there on a camp-chair I sat and saw the most glorious view of plain and lake and mountains I have had yet. The clouds obscured Mt. Blanc, but the other mountains came out clearly, except the Bernese Oberland. We sat there for an hour, planning how we would make the most of every day in this month, out of doors. . . .

Here is a description of one of the servants at the little hotel at St. Cergues (from letter of August 30, 1888):—

. . . Jennie (Janee they called her) had a short, stocky figure, hard hands, and the alert quick step of one who has no time on her hands, and no self-consciousness in her heart. But, oh! what a divinely beautiful face, can I ever forget it? Large dark eyes, with various expressions, sometimes so laughing and merry—sometimes so full of earnestness, and her whole being expressing sympathy. She had altogether the happiest face I ever saw. The whole village loved Janee. She was called on by every *pensionnaire* and every citizen to act in every capacity of love and service, and from before the rising of the sun, till long after the going down of the same, those busy feet knew no rest. She was a St. Cergues girl, but had married a laborer in Geneva, and goes up to Madame Capt for the summer. On the Annual Fête day of St. Cergues, a month ago, her husband came up to see her. The villagers had erected a platform, and planted evergreen trees all round it, and had colored lamps hanging in the trees, and there the young men and maidens danced all the evening and into the night, in the most modest and pretty way. I never saw anything like their waltzing. It would put to shame the same in fashionable dancing halls. Janee danced with her husband all the evening, and how their feet flew and how happy they looked! Meg and I peeped through the evergreens and saw it all. And so you can imagine how much I loved Janee and hated to part with her on Monday morning. She took both my hands in hers, and clasped them warmly, tears standing in her eyes. I gave her my photograph,—she was delighted. Then I went to say good-bye to that royal peasant woman, Madame Capt, the mother of her servants, and in fact of the whole little village. Such dignity, such repose of manner, such a heavenly spirit shining from the kind old face. She clasped my hand, "*Le Bon Dieu te bénit, ma chère madame, et vous donne bon santé,*" was all she could say. Ah! the long, cold, dark summer, and the sickness and loneliness, will soon pass out of mind. But these dear good souls, who live so near to God and who serve their fellows so faithfully, will never be forgotten. . . .

PARIS, *Oct.* 8, 1888. SUSAN I. LESLEY TO HER HUSBAND.

. . . Yesterday (Sunday), Henry, Margaret and I took a *voiture* and went to the Russian Church, a great distance from here, on the Rue Daru, a long way south of the Arc de l'Étoile. The church is beautiful, with gilded arches and pictures of Saints and Angels. The High Altar, gorgeous with tinsel, the officiating Priest in green satin covered with gold crosses. In a little

apse half-concealed by an arch, another Russian priest in a deep monotone gave a discourse in Russian. When it was finished, his desk was wheeled forward outside the railing of the enclosure, and fifty boys from seven to fifteen years of age, with their leader, quietly filled the little apse. The officiating priest at the high altar repeated, in the deepest bass voice I ever heard, the service of the Russian Liturgy. The boys in the apse responded in most heavenly music. There was no organ, or instrument of any kind, and yet the wonderful reverberation gave all the effect of a deep accompanying organ. Margaret could hardly believe that there was not another choir concealed in some other part of the church, but there was not. It seemed like a succession of litanies, and was the perfection of musical harmony. The boys were poor children in poor common clothes, though clean, but not robed as in the English Churches. We all thought we had never seen so absorbed and devout a congregation. They all stood, except the few strangers like ourselves who paid for chairs. They constantly crossed themselves and often knelt, prostrating themselves in the deepest abasement, their foreheads touching the floor. But one thing amused us, as they passed the desk of the preacher, they often grasped his hand, and he with a smile and warm pressure returned it, right in the midst of his sermon, and without stopping in that a second. "Well! well!" whispered Meg, "this looks like getting back to Spring Garden." The litanies and the divine music lasted an hour after the sermon was over, and we were quite worn out with the emotion of it. Then the congregation proper all went up to the high altar, where a priest whom we had not seen before, in a gorgeous robe and a purple velvet cap, held a gold cross sideways in his hands, and each person kissed it, and left the church. . . .

LONDON, *Oct.* 20, 1888. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . You know that sight-seeing is not for me. I have the rarest opportunity for seeing the Hill family in a perfectly quiet, friendly way, and I think I had better do that one thing and nothing more.

This morning after my breakfast I read most of my letters, which were all delightful, and then made ready to accompany Miss Octavia Hill to Southwark to see her cottages, and the Red Cross Hall, which she has built on land given her by the Ecclesiastical Commission. About ten o'clock she came for me in her sister's Mrs. Charles Lewes's carriage. In the carriage was also

Miss Yorke. We had a very pleasant talk and drive, and when we got there found groups of happy little poor children, playing in the open space Miss Hill has rescued for them. The buildings were very interesting, and the whole excursion a rare pleasure to me. As we came up the Strand, I asked them to leave me at a restaurant near Charing Cross and I would walk home, and parted from my pleasant companions, who made me promise to come with Miss Florence [Hill] from church to-morrow and lunch with them. I came directly from my lunch to-day and lay down with my book for two hours. It is "John Ward, Preacher," very interesting. At three o'clock Miss Florence Hill came to sit with me till five-thirty and we did talk. . . . Miss Florence brought me an invitation from her sister Mrs. Edward Maurice, who lives at Hampstead, to go out there Monday to lunch, and I have agreed to. Edward Maurice is the son of the celebrated preacher Frederick Maurice, who died some years ago. I expect to enjoy that visit. Miss Florence and her mother are both staying there. I wish I could go and see the People's Palace, for father's sake, but I have no way to do it. . . .

LONDON, *Oct.* 23, 1888. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . Well, after sending off the trunks, I made ready for Hampstead. . . . Oh! how I did enjoy that drive, and how beautiful it all was after we entered Hampstead Road, the fine old trees, the lovely churches covered with ivy, and the quaint old buildings! Arrived at South Lodge, Squire's Mount, I saw Mrs. Hill coming down the garden walk to meet me at the gate: . . . *such* conversation . . . ensued. Then Mrs. Maurice had to go off to meet an appointment in the Charity Organization, and Miss Florence left her mother and me alone, that Mrs. Hill might pour out her soul to me on the subject of Gladstone. . . . "This divine man," as she called him, "despised and rejected of men," wearing a martyr's crown, and never losing his patience and faith for an instant. She told me a sweet story of five very young children writing a note of sympathy to Mr. Gladstone, beginning, "We are five little Liberals,"—I wish I had time to tell it to you, and his answer. Miss Florence says that the sorrows of Ireland have sunk so deep into her heart [her mother's] as to make her nearly ill. . . . When I left them at four o'clock, they took me, before I got into the hansom, to the brow of Parliament Hill, to show me the exquisite view, and to tell me with what labor of years, Edmund Maurice and Charles Lewes, Mrs. Hill's two sons-in-

law, had succeeded in securing for all time the beautiful open space from which this view is seen by the whole neighborhood. Oh, what a picturesque place it is! These two men raised over a million of dollars to secure this ground. Before we parted like the most loving of old friends, Mrs. Hill presented me with a beautiful photograph of Gladstone. I came home well pleased, but tired, and lay down for an hour. Then came Mr. Estlin Carpenter to see me, and I wish I could detail the good Unitarian talk we had. . . .

July 18, 1888. PETER LESLEY TO HIS WIFE.

. . . I try to keep down my own impatience of this long and far separation, by thinking of your lovely and ever-fruitful alliance with our Margaret, and of your daily and hourly pasturage on the new field, the fertile meadow of that celestial baby nature, that precious Lydian stone, that embryo fine lady, that coming artist, thinker, philanthropist and missionary, that . . . everything that mother and grandmother can wish and imagine realized before the time. Think of the *bimba* as a grandmother! Sixty years hence! In the year of the Lord 1948! Where will the empires and emperors of this world be then? Will Jerusalem have been rebuilt, and Judea recultivated? Will Russia be Europe? Will the Great Republic sit on an ivory and gold throne in regal robes and with crown (or perhaps tiara) on her head? . . . Brother Jonathan dead and his seersucker suit buried with him? The fœtus in the womb of time may look horrid to our strained imagination; but when born, it may grow more beautiful than anything the ages have yet beheld. In America all eyes are riveted on the future, in Europe the past stands inviting attention, and receiving it now and then; but yet the multitudes regard it little, and fix their eyes, like ours, on the coming thing—*das Werdende*. Mystery of mysteries—what *shall be*. Not *will* be only, but *shall* be, *must* be, predestinated and arranged from before the foundation of the world; but locked up in the One Mind, and let out piecemeal like waters from a perennial fountain in the dark depths of the primeval forest. They call themselves—men call themselves *workers*, doers, makers, ποιηταί, poets; but they are after all *spectators*, lookers-on, and speculators of the unknowable.

Dear love, I speculate little; I am buried in a beautiful hades of fossil forms, and wander among them like a poet in a flower garden, like Emerson among his strawberry beds. Oh, how beautiful and curious they are! What suggestiveness they have! How many hundreds of odd, pretty, wise (and foolish) notions

they shoot into one's brain, keeping it as much on the *qui vive* as a bombarding enemy keeps a beleaguered populace. The brain is much like a city; it is divided into wards; and has its palaces and ghetto, its Signoria and its Belle Arti. . . .

PHILADELPHIA, *Nov.* 20, 1888. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . I like the name you give your boy. It is a noble name. What's in a name? A great deal is in a name. It is a stamp which sinks deeper as the child's years increase in number. The power of a name over the character of its wearer flows from its perpetual suggestiveness. Nothing but superlative genius can shake off the burden of a mean baptismal designation; and how much must be suffered before that can come to pass? Harold is a euphonious plain English name, and very good. Plain and especially common names are always best. For girls, Mary and Margaret are the commonest of all names and the most excellent of all. Shakespeare was plain William, Milton was plain John, Burns was plain Robert, Darwin was plain Charles, Washington was plain George, Webster was plain Daniel, all common household English and German names, the very best in the world. Thousands of English children have been plain Harold. I like it. If it be good taste to dress so well that nobody can remember what you have on, how much better it is that a child's name can be uttered a hundred thousand times without making anybody stare at him to see why he was so named! . . .

PHILADELPHIA, *Nov.* 27, 1888. PETER LESLEY TO ——.

. . . I love fairy tales before all sober history—always did—always will, if I live to be ninety. Fact is, life is a fairy tale,—a "Midsummer Night's Dream," with lots of Pucks and Bottoms in it, and an interminable procession of pairs of lovers like Theseus and Hippolita,—— and ——, —— and ——, all down the alphabet. A beautiful fairy tale, full of baby fairies. It has also tales within tales, and lovers in them, Pyramus and Thisbe over and over again.

How happy the world is made by its follies! What a heavenly invention folly is! It is only when the fool says in his heart there is no God, that he becomes a nuisance. When he loves God and his fellow-men he is a most amusing and delightful fellow; mostly more lovable than if he were a wise man. And books—can we ever obtain or desire finer recreation than from such absurdities? . . .

There was a special little bookcase in my father's library entirely filled with fairy tales. Nothing made him happier than to discover some new translation of native folk-lore.

PHILADELPHIA, *Dec.* 21, 1888. PETER LESLEY TO HIS SON-IN-LAW HENRY.

. . . I have half an hour before supper-bell rings. My 150th page has just gone back to the printer, and after supper I go to the A. P. S. to read descriptions of forty new species, which Simpson has found for me (and will draw next week) in our collections. I am pretty nearly used up; this week having been a regular country circus in the way of proof-reading. Ten of my correspondents have replied with corrections, additions, remarks, and all with notes of approval and sympathy: Matthews of St. John, Scudder of Cambridge, Dawson of Montreal, Dana of New Haven, Hall of Albany, Stevenson of New York City, Claypole of Akron, Ohio, White (I. C.) of Morgantown, W. Va., Safford of Tennessee, Fontaine of Virginia, Walcott and McGee of Washington, Lesquereux, and A. Winchell of Michigan. You may imagine what it costs me to get their new stuff and corrections into my text, after the pages have been adjusted to the cuts. I suppose the Harrisburg house will stop for a week at Christmas. That will be a breathing time. But what is 150 pages to the forthcoming 850! I am getting to dread the coming weeks. Nevertheless the book is a beautiful success, has evidently made a sensation, will bear good fruit, and is jolly nice work. . . .

PHILADELPHIA, *Dec.* 28, 1888. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . I have just laid aside "Robert Elsmere," at the scene of his first confiding his heresy to Catharine. It is a terrible book. I do not wonder it shakes so many hearts. Millions might read it however without much emotion; but the spiritually-cultured, the high-strung devotees of church Christianity, must see in it either a masterpiece of satanic temptation, or else—I hardly know what,—a light breaking on them from a dark place,—the sudden apparition of a friendly guide through a lost wood. But it needs the experience of the few peculiar ones—few in comparison of the millions, but really many in their sum total—to appreciate the book, its depth of insight, its power of narration, the purity of its tone, its manliness in spite of its womanliness, and its great wisdom.

My dear children, I wonder how all goes with you. If it be five-thirty P.M. here, it must be eleven in Paris, and you are sound asleep. I shall imagine you have had a loving and lovely little supper, baby frolic, and then evening of talk and reading. I wish I had seen your home; your mother speaks with joyous gratitude of having seen it. I wish I could see your new studio (or whatever you call it), my dear boy, and watch you at work in it. No babies here; no pictures or statues growing; very little reading aloud, for our old voices have lost their *timbre;* but everlasting peace and love abides with us, and will abide with us forever. God is everywhere, and he is the life and soul and mind of us all. I rejoice that he is invisible, for thereby he saves us from dishonoring or undervaluing his universal presence; I mean invisible as a material or formal personality; but very visible whenever I look into the mother's face, or at the lines of a letter from Paris or St. Paul. His spirit flashes along the lines, like an electric current; shines from the mother's face, as the sunlight does from the face of the sweet full or crescent moon.

There comes a time in life when peace takes the place of all hopes and desires, smiles at prayer, and smiles at fear. The smile of an eternal peace, begun while the soul is still confined in fleshly form, and matured when the body drops from it and it gets free.

There comes a time when all the soul loves, but cannot see, continues present to it; distance nothing,—time nothing. The past and future are both always present. The far is near. Then the lust of wandering to seek what is out of sight ceases, and the soul gets and enjoys another kind of vision; a vision which brings all loved things from all distances into the soul's lap.

Meanwhile, you may be sure that it is quite well with us, my dear ones. Think of us two as quite happy. We see you plainly. For both of us there is plenty of work. She is very active, the dear delightful guardian angel of us all. For my own work, it keeps rumbling on like the interminable, innumerable coal trains on the down grade Reading Railroad, every car full. . . .

PHILADELPHIA, *Jan.* 15, 1889. MOTHER TO HER DAUGHTER MARGARET.

I am sitting by our front parlor fire, the sun shining in at the back windows so prettily, the rooms always so full of associations with my dear girlies, Henry's beautiful bust of you placed on the mantel at just the right angle, and looking at me as I write. How

full these rooms are of all that is delightful, and how I look at all your pictures, from Mr. Fraley to Felix and from that to the sweet pathos of the old wool-carder! I am just as limp and weak this morning as can be—and every morning now. The whole sorrow and strain of the last two months ended, I find myself weak and quiet—all courage gone with my strength, but able in thought to fall back on the trust that comes to us all, when life has passed its meridian and we can no longer bear heavy loads.

Mr. Batchelor told me that when he was out west last spring he heard several people speak of "Shall we call him Master?" with enthusiasm, and one Sunday he dropped into a church in an obscure town in Illinois, where the minister was absent and two laymen were conducting the services. And one of them read that paper of Father's to the congregation, instead of a sermon. I told Father about it after Mr. B. was gone, and I think it pleased him very much.

PHILADELPHIA, *Jan.* 21, 1889. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I don't know that I have ever known your Father to have such steady peacefulness and enjoyment of life, for so many months together, as he has had since last June. I can pick out but two days since my return, when he has seemed at all low, and then he was not low in spirits, but only excessively tired. The work itself is exceedingly congenial to him. But in addition to this, he receives a stimulus most unusual and unexpected, in the real joy and satisfaction expressed by every man of science to whom he has sent the signatures. They write with enthusiasm, and take infinite pains to go over the pages carefully, making corrections, annotations, etc., in red ink.

Wednesday, Jan. 23, 1889.

. . . Not a moment have I had since my last writing, and the days go by in various work. This afternoon comes the Annual Meeting of the Children's Aid Society, and I have persuaded Aunty [Martha Swan] to go with me, for I like to have her know the things I am interested in. To-morrow I have to go with Mrs. Belfield, one of our Board, to look into the case of a child we have placed, whose surroundings we feel a little doubtful about. It is quite out of the City, and will take us the better part of the day. For the last fortnight we have had to have unusual and special meetings, requiring consideration of important questions, such as a desire on the part of one Western county to divide the

state in the Children's Aid work, which we have regretted, as taking so much of our time and work, from the real business of care of the children—occasioning many visits to the State Board of Charities—much correspondence, and much study of our legal status. It has ended in Allegheny County leaving us, and taking two other counties with her. But those two counties write us, that they have left us most unwillingly, and the other Western counties write us that they would not leave us on any account, having found us most helpful.

All these things have taken up much of my time, but I am thankful to have been able to attend to them. We have forty-five counties already organized, and in good working order,* with some of the most splendid women in the state enlisted in every county. It is a great and far-reaching work. While I am on the subject, I want to tell you that Cornelia [Hancock] has done some quite invaluable work for us in these last weeks, in going to distant counties, and bringing about most efficient co-operation between the Guardians of the Poor and our Society —taking the children out of the Almshouses, etc. . . .

PHILADELPHIA, *Feb.* 17, 1889. PETER LESLEY TO HIS SON-IN-LAW HENRY.

. . . I have always entertained a high admiration for the characteristic qualities of the various nationalities in France. Their mixture in Paris is not so satisfactory. But in the long run, even the Parisians may be trusted to come out right. France is in my sight the foremost nation on earth, the only *thinking nation;* and I am sure that the nation that thinks, is safe. No other people *think as a nation,* except the French. All nations breed thinkers, and great thinkers; but France has developed into a thinking nation as such. We Americans lag behind in that respect. We act—are an acting nation—with common ends and means, and consequently act with immense force. But I do not consider our people a thinking people. It is the difference between the reservoir and aqueduct. We read too much, we talk too much, we do too much, have too little taste for solitude and silence, to be a typical *thinking* people.

I have no fear of France.

I feel no disposition to write to you, my Margaret, of the death of your Uncle Joseph. You know what he has been to me through forty years. How much he has suffered the last six months, and

*That is, organized with committees of women to visit the children who are placed in country or town homes.

how complete a relief it must be to him to get rid of so worn out a body! I think of him now only as a free and happy spirit—where I know not; but I am sure that his new life is a good one; probably full of interest to him; and with plenty of employment. . . .

PHILADELPHIA, *Feb.* 18, 1889. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Father and I have very good times together this winter, and are both so thankful for our good health. This morning we waked at five o'clock and could not go to sleep again, and so we regaled ourselves with one of those rare talks we have not ordinarily any time for. I told him about some of my troubles in public work, and the difficulties all have to meet with, not from bad people, but from good people who cannot understand what you are driving at, no matter how hard you try to make it clear. And he said one such good thing, and so comforting, I could not help copying it for you:—

"When I am troubled in mind by checks and hindrances and feel inefficient, and my efforts futile, and myself *de trop* in the world, useless and perhaps in the way, I reflect on the function of nitrogen in the atmosphere. It is inert of itself; can support neither combustion nor life; seems to be a hindrance to the active business of the air, which is carried on by the oxygen; and is decidedly *de trop*,—for eight parts of air are nitrogen, and only one part oxygen. But on the other hand were it not for the restraining presence of nitrogen, the over-zeal of oxygen would devour all things, instead of keeping up life and joy on the planet. Were the nitrogen to be removed from the air, all living creatures would perish in one hour of time, except those protected by the sea. The world would flame up and turn to a desert of ashes. Human Society requires eight fools to every sage; and all organized benevolence eight parts of obstruction to every one part of zeal." . . .

PHILADELPHIA, *Feb.* 21, 1889. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I was much moved with the sweet little tales about Lesley and Margaret in connection with the Bible stories. It made me recall my Mother's Old Testament teaching, which I always thought was fine. When we were *very* young she only read us about Samuel and Joseph,—and Ruth, and such. When we were a little older—indeed very early, she taught us of the Fatherly

care of God—and we felt so safe at all times, from the knowledge of it. We knew it must be true, because Christ, his dear Son said so, and he knew all about it, and showed every one how no sparrow fell that was not known to the Father. Later, ten years old and over, we had regular Old Testament instruction, with such books as Milman's History of the Jews, etc. And then it came as natural as possible for her to say and for us to believe, that the way those mythical and often horrid stories were told, was the way the Jews believed, but not the way they *were*. And she had only to repeat the words of Jesus, "Ye have heard how it was said by men of old time, etc., but *I say unto you*, etc.," to make us quite sure of it. I agree with little Meg, "Zat wasn't a good sing," to pitch people into the Red Sea. But she'll forget about it, and if she is taught to love and reverence the dear Father of all, she will know of her own free thought that He never did those things. And, oh, how grateful I feel for the early lessons that have stood by me all my life! . . .

PHILADELPHIA, *March* 7, 1889. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . I must say something after Leidy at the Priestley cenotaph unveiling, next Wednesday evening in May's church. What? I do not know. I am no chemist, and a very poor Unitarian. Why can't people let a polywog alone in its pool? The human race was qualified to talk, and has done little else than talk since its creation; although the last Belgian finds seem to show that the tongue bone was not given to the earliest skulls, and therefore that for some generations the first men could not talk. But they could and no doubt did make up for it in squealing or roaring or hissing at each other.

PHILADELPHIA, *March* 24 (Probably), 1889. SUSAN I. LESLEY TO HER DAUGHTER MARY.

It [the survey] comes to an end in its present form, the 1st of June. But your Father has saved 8,000 from the last appropriation, and therefore he can have his salary a few months longer after that and keep 2 or 3 assistants so as to finish up his work properly. Moreover the survey is not wiped out—the status remains the same, and it is possible some different arrangement may grow out of it all, two years hence with another Legislature.

They did not ask for any appropriation this year; but the

Board of Commissioners still holds over, and there is literally no change except that there being no money, he will have to part in June with most of his assistants. But he will still keep the office, a few months longer, and finish up the publications.

Now he has to publish six more signatures, to finish 2 volumes of the fossil Dictionary, and this has to be quite completed by June 31st by the laws of the Printing Office.

PHILADELPHIA, *April* 5, 1889. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . And I have not told you yet, how Aunty and I went to hear John Fiske lecture on Daniel Webster, nor how I went to the last Monthly Club reading by Prof. Davidson of Harvard, of Scotch poems, and how he told us of Lady Nairn, who wrote ninety poems which he considers superior to Burns'. And he told her story—a remarkable one. How she seemed to aspire to nothing beyond being a good wife, mother and friend, and was not known to the world as anything besides, but was greatly loved and respected. In secret she wrote and published her poems anonymously, never confiding the fact to any one but her sisters, who kept the deep secret. Once they asked her why she did not tell her husband, and she answered quickly, "Because he'd blab." She lived to be ninety-two, and after her death the sisters told her authorship. Much astonished was her little world. And the people everywhere, who had tried in vain to discover where the poems came from. She wrote "Buy my caller Herrin," and "The Land of the Leal." She sat near her open window, and near her open piano, when Prince Charlie and his suite entered Edinburgh. As she sat watching the gay equipages, and the "ladies clad in silks and laces," who "cast their eyes and screwed their faces," she saw a group of mourning fishwomen among the crowd, just made widows by a fearful wrecking of boats off the coast, Every time their sad and musical notes rang out above the gay din, "Caller Herrin," she stretched her hand to the piano, and struck the tones to fasten them in her memory, and before the gay procession and the fishwomen had all passed, she had composed the poem and had set it to music. In this way she composed nearly everything, setting them all to music.

PHILADELPHIA, *April* 11, 1889. PETER LESLEY TO HIS DAUGHTER MARGARET.

[He writes of the death of his old friend David Trumbull:] Did Susan tell you I had lost my David? They used to

call me his Jonathan; but in fact he was my Jonathan. Of all my friends departed, his face alone comes before me perfectly clear. That tells the tale of our love. And yet for forty years I only saw him three times. That tells the tale of human life and its contingencies. I do not even know when or why he died. Valparaiso is on the other side of the globe. Surely somebody will write Trumbull's life.

PHILADELPHIA, *May* 15, 1889. PETER LESLEY TO HIS WIFE.

. . . Your letter was delightful reading after breakfast; all the more because I feel a little shrivelled by the cold; for they had a hailstone whirlwind in Virginia yesterday. I can see the beautiful trees and rocks from your dining-room windows; and I can see you and Rebecca sitting at table together gossiping, and you and Alice Cary; and you and Annie Ware; and you and John Forbes; and you and . . . all down the Massachusetts alphabet. Yes—bless your loving heart.

. . . Everybody is kind to us. Another cordial little letter from Dr. Newberry, promising to get from Washington for me advanced plates and sheets of his Triassic plants and fishes, to cut up for my Dictionary. . . .

PHILADELPHIA, *Sunday, June* 2, 1889. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . I am as bad a correspondent as yourself, and for the same reason. This world is one of sordid haste; the next I trust will make up for it with a surplus of elegant leisure. If Geology be the science of dead forms, History is the science of perpetual chores,—fortunately most of them very much alive indeed, and full of interest to the planners and doers of the same; as I have long ago discovered to my great joy, and as you have certainly certified by your own prosperous and happy experience. We are both of us favored with regular, profitable and perpetual work of a useful kind—may it last forever for both of us—may we never become gentlemen. The noblest title ever bestowed on Man was, "Servant of the Servants of God." If Saint Peter receives us at the gate of Paradise with this title, we can dance a celestial hornpipe up to the very foot of the throne.

I am (in spirit of course) dancing a hornpipe of a more modest and terrestrial character, just now, in view of the impending avatar of Venus and her three Cupids in our Paphos—*Mass.* Magic word for many more than those born in Boston. Under

the Walnuts will be better than under the Olives, or under the Lindens; although I should like a stroll this fine morning in front of the *Schloss*, with a slight chance of seeing that Lord Randolph Churchill of an Emperor, who threatens to make a better record for himself, after all said and done, than the world at large dared to hope. The son of such a father and mother ought to; that is, after the potash of the one and the chlorine of the other has been stirred long enough together over the slow fire of a politics which is more like a Bunsen burner than our old Arab cook Ali's three bits of charcoal blown with his feeble old patriarchal breath.

I wonder that our theologians of the Augustinian and Dominican schools do not recognize the fact that the real hell fire is human politics. We all in fact always live in Hell, and I for one admire and like it bravely; it is like being always at sea and always in a gale. Susan and I read part of the last issue of the Lincoln* yesterday before the supper-bell rang, and we made our regular Saturday *convive*, G. B., stop before he began his personal questionings, to listen to it. It is to be an immortal history, depend upon that. What an enormous difference between such a history written by two actors in the great drama, and a history like George Bancroft's written by a pedant and recluse! Item, Herodotus. Item, Gibbon. Both great travellers and observers. It is indeed the book of the Century.

En passant, read the exquisite little novel (800 A.D.) "Passe Rose." . . .

I am jesting to try to keep out of my mind the awful calamity along the Conemaugh, the worst (except the great battles of the Civil War) that our Nation has ever had to lament. The number of the lost already amounts to 3000.†

. . . I am saving up about three weeks' work which I can better do with Mary and the children at Milton than here. I wound up the Survey yesterday. The Hazleton office was sold out. The Scranton office stuff comes down here. The Pottsville office remains open for six months, and Smith and another aid will work there, reading proof and making cross-sections. E. B. Harden keeps the Walnut Street office going, with Mike to help him. O. B. Harden will work at the Post-office and in Clinton Street, when I need him. G. B. Simpson has just annotated the great Claypole collection, and it is boxed and deposited in

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* Abraham Lincoln, a History. By John G. Nicolay and John Hay.

† Johnstown Flood.

the Academy vaults. As soon as I get some plates (promised daily the last fortnight) I shall begin to print again, and finish up Vol. 1.—After July 1st, I begin to print Vol. 2; and then in August or September Vol. 3, the Appendix. By Oct. 30th, I hope to have all my fossils buried under 45,000 feet of Palæozoic strata. Amen. . . .

MILTON, *June* 16, 1889. SUSAN I. LESLEY TO HER HUSBAND.

. . . The last ten days have been full of heavenly rest for me. I have had such sense of leisure, "fine old leisure"—no hurry any more—no pressure of any kind—always the sweet, cool, green glancing leaves to look out upon, always Rebecca's kind pleasant face within doors, Martha's gentle stir of preparation for her housekeeping. . . .

. . . I have written a few letters, and have had the kindest responses to the little fund I am raising for the Johnstown children. You need not mention it, but I have sent Mrs. Biddle very nearly 700 dollars, and I do believe I will soon have a thousand.

PHILADELPHIA, *June* 17, 1889. PETER LESLEY TO HIS DAUGHTER MARGARET.

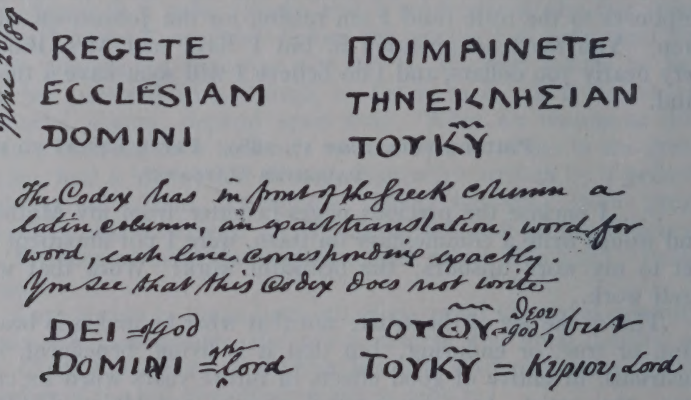
. . . I enclose the precious pages [a letter from my Mother] and would write a commentary on them, were I not impatient to get to my work upstairs; the beautiful work! Work that will itself work.

This is the joy of the artist; not that what he makes is beautiful, or true, or enduring; but that it is living, beneficent, industrious, inventive of good effects in future years when its creator, the artist, has disappeared. So a machinist designs, creates and sends forth an engine, which thenceforth shall carry lovers to the Alps, or corn to the starving. The statue stands in the public square, the historical painting hangs on the Town-house wall. They appear to be dumb and dead; but they speak in many languages to many souls, and create energy and inspire ideas in generations of people. Long after I am dead, my Dictionary will pass from hand to hand, teaching young and old the quaint legends of extinct life. . . .

PHILADELPHIA, *June* 20, 1889. PETER LESLEY TO HIS WIFE.

. . . Let me amuse you with a really wonderful coincidence. I read a remarkable essay by Abbott, on a verse in the "Acts:

Rule (Feed) the church of God, which he redeemed with his own blood," to show that the weight of evidence was against "God" and in favor of "the Lord." It was profoundly learned and interesting, and I longed to see some of the ancient MSS., especially those written in the Uncial characters. I put it out of my mind as a hopeless wish during my present occupation. That was only last week. On Sunday I was sitting alone in Sister's little library in front of Harry's books, feeling very downcast and sort of despairing. I reached out my hand to a long row of about fifteen great quarto volumes looking like an encyclopædia, and took one of them at hazard, opened it, and the first thing my eye fell on was that verse in Acts written in large facsimile Uncial characters, copied from the celebrated Codex in the Oxford Library. What do you think of *that*, my cat? I will draw it from memory for you. . . .


June 20/09
REGETE
ECCLESIAM
DOMINI
ΠΟΙΜΑΙΝΕΤΕ
ΤΗΝ ΕΚΚΛΗΣΙΑΝ
ΤΟΥ ΚΥ
The Codex has in front of the Greek column a Latin column, an exact translation, word for word, each line corresponding exactly. You see that this Codex does not write
DEI = God
DOMINI = Lord
ΤΟΥ ΘΥ = Θεου, God, but
ΤΟΥΚΥ = Κυριου, Lord

Now, my dear Susan, I don't know how it may strike your mind, or anybody's mind; but I consider such an adventure as marvellous to the last degree—absolutely unaccountable by any law of chances,—for in this case the chances were (1) one to say 10,000, about the number of leaves in the whole encyclopædia; and then (2) one to—how many?—that I should have opened this volume in preference to any of the two hundred in the Library: and then (3) one to—how many?—that I should come, as it were directly, from reading Abbot's Critical essay on that verse; and then (4) one to a thousand or so that the compiler should have selected that verse from all the verses in the Acts; altho' this chance is much reduced by the importance of this

verse in theology. But put all these together and, after all, my adventure stood a chance of only one to several millions. . . .

This coincidence my father often spoke of in later years,—certainly a remarkable one.

MILTON, *June* 21, 1889. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . I can't tell you, dear, how much I love this Milton home. It seems to me an earthly Paradise of peace and rest. The sounds of Nature have always been most delightful to me—the rustle of the leaves in the breeze, the sweet low notes of the Phœbe bird. I regret to say that I have heard no Bob Whites this year. I hope that civilization has not driven them away. I came here tired and sick at heart. The awful calamity at Johnstown and through the Conemaugh valley weighed on me. Our Committee of splendid women had been swept away by the flood,—all but one. We had sent Miss Hinckley and Miss Hancock out there, with tents and provisions to aid the one woman left of our Children's Aid workers there, to set up a Bureau for the care of all the orphans of the flood. It was no light work, you may believe. But H. H. has enthusiasm and ability, and Cornelia, you know, would be equal to the occasion. . . .

PHILADELPHIA, *June* 25, 1889. PETER LESLEY TO HIS DAUGHTER MARGARET.

. . . The curse of American Life is speculation—the lust for making money *through others*. No man can be a successful speculator, who is anything *but* a speculator. Speculators always make their profits out of people who have their own business, but desire to add to their incomes in some outside way. Speculations at a distance from home are always disastrous. Nothing succeeds unless the adventurer is all the time on the spot, and throws his whole life into it and attends to nothing else. But if he does this—he becomes of course nothing but an adventurer. . . .

PHILADELPHIA, *Sept.* 8, 1889. PETER LESLEY TO HIS WIFE.

Alas, I had a letter from Lacoe yesterday, who had learned from Leo Lesquereux, Jr., that our dear old friend lay *without memory*, predicting his own departure week after week. "I cannot live out this week." It will be like missing one of the great stars from the sky, Vega, or Aldebaram, or Sirius."

PHILADELPHIA, *Sept.* 27, 1889. PETER LESLEY TO HIS WIFE.

. . . Oh, how many, many things I might write about! I was seized to-day with a real *cacoëthes scribendi*, just like that furious longing to lecture and to preach to multitudes, which used to come over me with a rush in past years. I long to send an Apologia for Bellamy's Vision to the *Forum*, to show its readers how the figure-mongers and professors of political economy science, falsely so called, mystify every social question, and keep down the enthusiasm of humanity for a nobler and happier organization of human life on the planet.

But my pen has lost its cunning, my old brain its fire, perhaps my heart, spoilt by luxury, its enthusiasms. Yet really I am still like an old war-horse, pastured in a field, who pricks up its ears at the sound of a trumpet, and canters to the fence over which its stiff limbs can no longer leap. The trumpet notes die away in the distance, and the old horse returns to the part of the pastures where it has found the grass thicker and tenderer and sweeter than elsewhere. So I go to the League just now,—to post this *billet-doux* to you and my Meggie—and to take a half-hour's browse on Ernest Mouet's "Modernité des Prophètes." . . .

MILTON, *Oct.* 2, 1889. SUSAN I. LESLEY TO HER HUSBAND.

. . . I have been feeling happier in mind ever since I began my paper on "The Family System a Cure for Pauperism." It is poor stuff enough that I write; is far better set forth in these beautiful books on the "Children of the State" by Florence Davenport Hill and Mrs. Senior's (Hastings Hughes' sister who died years ago) Reports in England. But then the people who meet at Altoona, Guardians of the Poor—women from distant counties—do not have access to these books, or have time to read them, and any earnest summary of facts that is sent them, for an evening meeting, they listen to, and carry away something. So this motive, and my real desire to help my colleagues in the difficult work of persuasion, makes me keep on with my paper, and the motive and the work are helpful to myself. . . .

PHILADELPHIA, *Oct.* 2, 1889. PETER LESLEY TO HIS WIFE.

. . . Everybody is congratulating me on the gold medal awarded me at Paris for "original investigation," as if I had made the survey, and as if I had invented a new "monkey soap," and wanted a medal for an advertisement.

I have received from Ruth Putnam—one of my father's and mother's dear friends of a younger generation—some appreciative words referring to this period of their life, accompanying one of his letters to her, which I print here:—

. . . Nothing can ever obliterate my memory of the Clinton St. house with the two dear people working on, each in their own line. It was in the years after you and Meg were married that I knew it best. I loved to go over to Philadelphia whenever Mrs. Lesley asked me. What fun it was to help them get ready for their flight to Europe without letting any one know of the plan! Often, though, there was no purpose in my visits beyond my own pleasure. It was my delight to lure your father on to imaginative speculation—an amusement in sharp contrast to his scientific accuracy and rated by himself at its true value, as a recreation pure and simple of which he need render no account even to himself. Once he made me take lessons in hieroglyphics, at his expense, not primarily for my instruction, but because he wanted to aid a poverty-stricken *savant* from Lithuania. It was a memorable experience for me, because I obtained a few odds and ends of information which enabled me to ask questions on Egyptian subjects with a show of understanding that elicited long replies from Mr. Lesley, who was further stimulated to his old-time enthusiasm for things Egyptian by the plates brought out to serve as text-books in the lessons. He would talk on eloquently or with a quaint fancy according to his mood. And his dreams that occasionally followed these flights of fancy afforded exquisite delight to us both.

The game of question and answer went on between us for years, especially when one or the other of us was in Europe. His letters were, naturally, interwoven with news of you all and with kindly sympathy for all that affected me. Then again his pen would start on one of the long excursions that we liked. To my sorrow I have lost the earlier letters. In 1889 I must have written from London when the darkness was depressing us in the short December days. He writes:—

"Sun-worship proper was born in the far north and yet no one has added that to the other arguments now ventilated for the Scandinavian origin of the Aryan race, which is that of the *true* sun-worshippers. The southern sun-worship was quite different, a Shu worship, a worship of fear."

Then follows an enthusiastic account of Miss Edwards' Egyptian lectures which had been given in Philadelphia that year. A

later letter, March 10, 1890, is in response to an account of our journey into the sunshine of Southern France—the sunshine, the very thought of which stimulated his mind and turned his meditations into old channels.

"I am delighted to send this to a place where the sun shines. People here are flocking to Florida and swarm there like the English on the Riviera. Your experience [of regaining sunshine at Orange] was precisely mine four years ago, when Margaret took me to Nice to recover from the grippe. We had not seen the sun in Paris for six weeks; found a Lyonnaise fog; got into sunshine at Orange, and never saw a cloud at Nice for ten days.

"Yes, fifty-six years ago I rode through Orange on top of a diligence. The arch delighted me. The view of the theatre wall was awe-inspiring to me (then). After seeing greater Roman ruins and Egypt, it still remains a fine object for the imagination. I saw it again a few years ago, but again only from a distance.

"Oh that I were young again—the boy in a blouse, with a knapsack! How many a place I should visit and revisit! The Saracens held all that district for more than a century. They towered the Arena at Arles into a fortress and made that place their capital city. Their forays and temporary holdings were in various directions. Charles Martel's battle was at Poitiers. What pests and parasites men have been to men in all successive ages! Into a peaceful, long-settled nation a foreign race breaks and burns and metamorphoses and solidifies, like a lava dike across sedimentary strata. The dike always ramifies,—always ends somewhere in the mass with a knife edge. There are fixed limits of resistance. The Roman power never could penetrate Germany, although it reached the Rhine in the west and the Danube in the east. The Frank emperor pushed through the whole of Germany to the Vistula and broke the Huns in Austria. Nothing is more interesting than a study of the limits of the areas of the impetus of each warlike race which played its part in history. A fresh race is under a home pressure at high tension like that of a gas well. It seeks a vent in all directions, but finds it only in one direction, and exhausts its force at such and such a distance from its home centre. That tribes of Arabia should have reached *by land* Morocco, Spain, even France, shows plainly the enormous brain power of the Shemitic race. On the other hand, if the Hyksos sculpture at Bubastis and Tanis was really Scythic, as no one can now doubt, the mental ability of Mongol leaders could hardly have been less; certainly the *physical power* of the Turanian nomades which again and again expended itself

until it had projected hosts to such immense distances as Thebes, Constantinople, Vienna, and Rome is a marvellous phenomenon.

"But all these episodes of human history only prepare us for the grandest of all occurrences—the English settlement of the globe. What preparation for it! What execution of it! What results from it! Did you ever read the adventures of Hadji Baba? If so, you have learned why the "Orient" is dead, and what killed it, and can conjecture how it may live again.

"You might suppose, dear Ruth, that my ancestry once lived in Asia, so keen has been interest all my life in those lands of effete humanity. Perhaps they did. Perhaps the Aryan race did in fact cradle itself in the Pamir. Everybody is now in the new mood of proving from the beech-tree that the Aryan race came first from Sweden. Brinton is trying to prove moreover that the Shemite race was aboriginally Atlantide. Such are the fluxes and reflexes of the great tide of learned thought.

"But, in truth, my ancestors must have been monkeys, I hate the cold so cordially, and would like the mercury to stand between eighty and ninety degrees all the year round. My oriental studies date from Addison Alexander at the Theological Seminary at Princeton. The Latin and Greek of the Academy and University were bores. I woke to the joys of the Comparative Philology when Genesius was put into my fingers. What a fresh world was there! How I dashed at Arabic, Armenian, Coptic, Persian, Sanskrit, as if I were at a football play. Then I went back to Greek and Latin with wide-opened eyes. When I had German as a vernacular I played with Danish, Swedish, Icelandic. After reading Sir Wm. Harcourt's first book, I devoured Welsh, Erse and Gaelic. After Barrow's book, I spent months over the Basque and Zingari; got Hindu and Tamil lexicons and new testaments. After I got Hale's great 4° of the Wilkes' Expedition, I made comparative lexicons of the Polynesian dialects. I bought Morrison's dictionary and plunged neck-deep into the Mandarin dialect, and then compared the Corean, Japanese and Malay. All this brought me back to my old Hebrew studies, until at last I found myself like an ass tethered comfortably and permanently between the haystacks of Hebrew and Egyptian, where I have peaceably and pleasantly been munching and munching ever since.

"Who can study the languages of men and not burn to learn the histories of men? And what American who has been so busy as I with railroad and iron furnaces can fail to chew the cud of sweet and bitter fancy in the field of that great Politics which

regards not the contention of local Sophomerical parties, but the true future destinies of the nations?

"Where are the Saracens of Orange and Arles now? They are playing the same old game, on the same grand scale, throughout Central Africa. As they were driven back by the Franks of Western Europe then, they will be checkmated by the more powerful Franks of Western Europe and North America now. I have no doubt of it. Steam has issued its ukase; Africa is to be the next stage of the human drama, then Asia; I mean western and central Asia. Palestine and Persia will in the next century become again what they once were, gardens of roses and fields of wheat. Our grandchildren will see the return of the exiles. Change as may the Jews, give them a fair chance, and they flock back like doves to their cote. Jerusalem will one day resound with the noise of the blast furnace and the cotton mill. Some future Napoleon III., by some future Viollet-le Duc, will restore the ruins of Persepolis, and rebuild Baalbec for mere beauty's sake. The Hauran will have again its thousand towns and villages. Anatolia will become a powerful republican state like Pennsylvania. There will be a Vanderbilt for Mesopotamia and a Wm. B. Astor at Bagdad.

"Why should we regard the world as old, on its last legs, a lean and slippered pantaloon, blear-eyed, half-deaf, faint-hearted and feeble-handed. It alone possesses perpetual youth. It blooms like a cactus often and suddenly, and keeps on blooming. It has carried animated beings these thousand millions of years—why should it perish just in our time? It will be a thousand million years before it approaches the sun as near as Venus is, and Venus seems as well off where she rolls as Terra where she rolls. Millennial folk-lore is all mere superstition. Volcanic fires, plications of the earth crust, comings and goings of comets, have never stopped the pregnancy of divine Nature. We know of no agent of destruction which may interfere with the process of the historic centuries. Man has swept into oblivion the multitude of great animals of the last past age, but he alone can destroy himself, and there is no sign of suicide. The races of men will mingle more peaceably and live more securely in the future than in the past.

"There will always be Messiahs and bibles for mankind; life and death for the body; joy and sorrow for the soul of man. And there will always be peace and war for the nations, but also always art and commerce. When new lands grow full of people, old lands will be reclaimed, and republics will replace tyrannies,

I believe in the glorification of South America, in the regeneration of Africa, and in the rehabiliment of Asia, whether these processes require one or ten centuries for their accomplishment.

"Why have historians so little hope? Nay, first answer me another and fundamental question, why has the word been written first with the weakest and thinnest vowels ἐλπίς, then with a stronger vowel, *spēro*, *j'espère*, lastly with the broad strong vowel hope, *Hoffnung?* The distinction is instructive. For the same reason that ἔρις means merely the strife of two men, but ἄρης the war of two armies. It is the distinction of stick and staff; the difference of the Ionic and Doric sentiments. It pervades the Turanian languages. Hope is the feeblest of the three virtues. It is kept puny by the sorrows of life. It has grown strong with the progress of humanity. In the great future of the world it will precede both Faith and Charity, and become Confidence. Knowledge has adopted it and is educating it to be the ruler of the world. I hope that Asia will be relieved of the Turks! No. I know that it will shake off that frightful despotism. And Egypt. And Russia. I am soon to leave the world, but I shall leave it with a great hope that I have never had for myself. The future of the individual matters nothing except to himself. The future of multitudes, of races and nations, is a serious matter, and has been long and well provided for by the Artificer and Inventor of the World, be he who he may.

"My dear Ruth, I am tired of these thoughts and of writing them, but am never tired of thinking how kind it is of you to remember and write to your old friend,

"J. P. Lesley."

CHAPTER XXXVI

Last Years of Professional Life. 1890–1893

In 1890 came a painful break in my mother's relations with the Children's Aid Society.

She had felt the greatest enjoyment and satisfaction in her work as a member of this society. She loved and admired the women with whom she was associated. It was, therefore, a great grief and distress to her, when, after a series of years of entire agreement with their methods she was at last obliged to differ with the majority of them as to the way in which certain defective and degenerate children should be cared for.

The Children's Aid Society had taken its stand in strong opposition to the care of children in *institutions*, as affording the poorest chance of their proper development. They believed that the best institution was not as good for an orphan or neglected child as a moderately good home. All the efforts of the society were therefore directed to finding the best home for each of their helpless charges, and they were wonderfully successful. Of this method my mother heartily approved. But during the experience of several years she had come to the belief that there were a small number of children, who, through mental and moral defects, were a disadvantage and danger to the homes they were placed in. It was never possible to keep them in one home for any considerable length of time, and they had to be continually changed from one place to another. *For this class of cases* she came to the conclusion that a wisely chosen institution was the proper place. And as there was such a place at Media (near to Philadelphia), she advised that the Children's Aid Society should relieve itself of the anxiety and over-expense of these children, and place them where, she believed, they would have expert care and the most favorable condition for improvement. The

discussions on the subject were long, and to my mother painful. The society was unable to accept her view of the matter, and rather than be a difficulty in its councils, she, with several other members holding similar views, withdrew from her position on the board. But she suffered more from this rupture with her friends than, I think, any of them could imagine, and missed greatly her constant association with them in the work of the society.

From this time she threw herself still more ardently into the St. Mary Street work—and found great comfort in it.

Much of her sorrow in leaving the Children's Aid Society came from the fact that her dear friend, Mrs. Anna Wilson, who was at the head of the office, was also obliged to leave her position. For Mrs. Wilson my mother had not only a deep affection, but the highest admiration on account of her ability, judgment, and efficiency, and her untiring devotion to the work of the society.

About this time my father began to prepare the Final Report of the Survey. It had been his desire for years to make these volumes a complete summary of the twenty years' work of the survey, and also to embody in them the scientific generalizations of his maturer years. But, when at last he came to the time for beginning it, he found himself appalled and disheartened by the greatness of the undertaking. "I am too old," he said sadly. "I can never do it."

Nevertheless, presently finding that he had already written (and forgotten) some of the earlier chapters, he was encouraged to make the effort and was soon at work with his wonted interest. But at times great depression came over him, and fresh despair of performing well what he had in hand. He forced himself to work with failing powers, spurring himself to fresh effort with a pathetic determination to fulfil his task. For three years he struggled on, driven by his own strong will, urged on by the Board of Commissioners, and goaded by the State printer with constant demands for "more copy" ever and faster, more copy.

As I look back at those years, I wonder that we could

all have been so blind, so careless of his weary struggle. It was like urging on the pace of a noble steed to its death. There was a cruel lack of perception. Sometimes he was really ill, and had to desist for a short time, but until 1893 he always recovered, and returned to work; with less and less power and greater hopelessness. Yet much of the time he was quite his old self, with a keenness of interest in his books and in all that surrounded him,—with even a buoyancy of spirit at times that hid from those nearest to him the fact that disaster was ahead.

Finally, one day, after several months of illness, and a partial return to work, he broke down completely. The pen fell from his hand, and he never again lifted it for anything but the slightest uses.

For some months he hoped that strength to finish his great work would return to him. Every one on the Survey Board and the assistants were kind and patient, and waited for his recovery. But it was not to be. The end of his active life had come. A "premature" old age, the doctors called it; and yet he was seventy-four, and, but for the natural vivacity and strength of his nature, might have been called *old* before this time.

It will be noted that the letters of the early part of this chapter were written before the dark period I have just spoken of. As he and my mother were now almost constantly together, the letters were mostly written to their children.

After his serious breakdown in 1893 there were two or three years of great distress and anxiety. My mother then took the chief care upon her own shoulders. Any one who has had charge of a case of complete nervous breakdown will understand how great were her burdens.

For a few years they still spent the winter months in Philadelphia; but at last the sight of his deserted study became a distress to him, and they broke up the old home in Clinton Street, and made Milton their one residence.

Here, after the first years of deep gloom and anxiety, peace returned to him, and he resigned himself to a life of quiet and repose. One of our dear friends once spoke

of him as "The Sad Man," but this was only a very partial description of him. Sad he often was, but the days of despair and hopelessness were past. In this lovely spot, surrounded by constant affection, with the companionship of old friends and new, he passed many happy hours. He loved to sit on the porch, even in quite cold weather, and all through the warmer days he was usually to be found there, either pacing its length or sitting in a sheltered corner, book in hand. He read voluminously, as always, and kept up the keenest interest in public matters. When too tired to read himself, he would get some one to read to him. Often his cheerful laugh was to be heard, often his voice full of enjoyment and vivacity as of old, talking with whoever chanced to visit him. Again and again he rejoiced in the return to the scenes of his early married life, and found an added charm in the woods and lanes, familiar to those bygone days.

Many of the old friends and relations still lived in Milton and the neighboring towns, and there was a constant coming and going in the family, so that there was little loneliness, even in the depth of winter.

For my mother, her serene spirit knew no change. Silently she had borne the anguish and anxiety of the first years of my father's breakdown, carrying him through the dark hours with her brave spirit. And now the prophecy which he had made nearly fifty years before was verified:—

> . . . I half believe that when I am an old decrepit man, sitting all day in a well-worn arm-chair, my volatile and restless nature fixed like carbonic gas into a solid, snow-cold equanimity, she will be briskly moving round me like a bright planet round a gone-out sun, and returning me the little borrowed light and heat I have ever been so happy as to give her.*

PHILADELPHIA, *Jan.* 23, 1890. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I hope to send you to-morrow a *Children's Aid Journal*, which has my paper on "The Family System a Cure for

* From letter of Peter Lesley to Miss Catherine Robbins, August 14, 1853. See page 299 of Vol. I.

Pauperism." It was too long for the paper, and so I left out the part which did not represent the views of the Society. But to me that is a very important part, and if you read the printed page to Charles as I hope you will, some time, will you, when you come to the stars of omission, read the MS. pages I shall send with it.

I have been having a rather hard time in the C. A. for a year past, but I don't want to waste time and strength in telling the story, and the work is so noble a one I don't want to disgrace it by silvern speech, when silence is golden. But some day next summer, I will tell you the whole tale, with no embellishments, when I have you all alone by myself, and am as sure of your sympathy as I can be. . . .

PHILADELPHIA, *March* 22, 1890. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I will tell you of yesterday. . . . I rose with a little of an anxious mind. Some of our friends have been for months on a rampage against Institutions. I share their dislike to the full, but don't believe in an antagonism which prevents all co-operation with *the best* of them, because I think we lose our power of enlightening them by showing our better methods. Unfortunately, just as their feelings are at fever heat, terrible developments have come out about the Blind Asylum, and a Legislative Investigation is going on—also another by the State Board of Charities, and still another. It is terrible to think such abuses can be practised on blind and helpless children, and when I use the word "unfortunately" I don't mean of course that I am not more than glad of the exposure, but only that it charges an atmosphere, that should be quiet to do its best work, with a distressed spirit for which *they*, our Society, certainly are not responsible. But, you see, the horrors of the blind Asylum have started all these investigating Committees to look into all the other Institutions, and of course have brought out all the ugly and prejudiced testimony, as well as that which is worth something. And the Eastern Penitentiary comes in for its share, and no one seems to reflect what powers it requires to take charge of twelve hundred criminals, and how impossible it must be to make a paradise of it.

But I must not go into this any more. After breakfast I went up to the Children's Aid a few moments in my coupé. Dear Mrs. Wilson came from a Committee Meeting bright and cheerful and full of courage, to tell me how the atmosphere had

been cleared up by two of the number of good common sense and calm wisdom; and I went away happy. . . .

WASHINGTON, *April* 16, 1890. PETER LESLEY TO HIS WIFE.

. . . The memoir of Lesquereux* was a great success, although it came so late that I could only give fragments of it. A superb memoir of Dalton by Weir Mitchell came first—a gem—a *chef d'œuvre.* Then followed a long and most interesting memoir of Loomis by Prof. T——, I forget all names now. I finished mine at 10.10, and they crowded round me to express their regret that I had left out anything. Half the audience were the wives of members. . . .

WASHINGTON, D.C., *April* 17, 1890. TO HIS WIFE.

. . . This Thursday has been a very long day. After breakfast had very interesting two hours with Walcott, and A. Winchell and then H. S. Williams. Astonishing new fossils, one paralyzing to the geological intellect, trifid tracks in the Potsdam! Vertebrates!! Birds!!! Plenty of them.—We had over all the records of the geological congress. Very bad mess. Went to meeting at eleven. Langley, charming paper on firebugs. . . .

PHILADELPHIA, *June* 3, 1890. PETER LESLEY TO HIS DAUGHTER MARY.

. . . My head has grown feeble thinking about the coming months, weary months they will be. I am very feeble and good for nothing—but not at all ill.

. . . I have had a few tit-bits of Egyptology recently—not much—only enough to wake up my old appetite. I wish I were in a way to learn the latest things. I wish I could spend a semester in Berlin studying under Erdmann, or even in New York under his scholar, Dr. F. C. H. Wendel. But what an old fool I must be, to talk of going to school to learn Coptic! Don't be ashamed of your father. I was never anything but an amateur except in topographical geology. In that indeed I have been a master, inventor and founder of a school, which has now many professors who have all been in one way or another my students. How strange it is that a man should always pride himself on what he can't do well, rather than on what he can! Yet it is a

* Obituary Notice of Leo Lesquereux. By J. P. Lesley. Read before the American Philosophical Society, March 21, 1890.

natural failing. For what a man can do well is easy to him, and he doesn't admire it at all. What he finds hard to do, and does a little of, *that* is admirable to him. We are all born explorers—not indeed of Africa—but of some—or several equally "dark continents." And whether we light on giants or pygmies, it is all one, and all delightful. I have been reading Vambéry's book. How childlike are his utterances! The chapter describing his entrance into Meshed—and into Teheran is lovely.

I wish I could write out for print my adventures in 1844 in the south of France. I took so many sketches it would make a very pleasant book.

Interrupted by the arrival of a wagon-load of things from the garret of the A. P. S., to increase the chaos at 1008 Clinton Street. Great trunks full of antediluvial relics of a lost world of work. What a virtue is displayed by those who burn their ships on landing on a new shore! Here is a trunk of Iron Association MS. and account books! They at least shall all go into the ash barrel. Here is a vast trunk full of crockery! I am afraid to open the lids of the others.

The A. P. S. has got the courts out, and contracted for fireproof floors, and a fourth story for the accommodation of its library! At last. And yet too soon. Poor Phillips meant to spend the summer in Europe. Now he must spend it in removing and storing in the Fidelity vaults the *whole Library*. . . .

PHILADELPHIA, *June* 4, 1890. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I have gone through much since I wrote you, in leaving the Children's Aid. But now it is all over, I realize that it is well for me to be relieved of the long strain. I could not have gone out voluntarily, so it was well for me that circumstances drove me out. I don't care for anything so much as the loss to the children of Pennsylvania of Mrs. Wilson. All the rest of us could go and not be seriously missed, but hers is an unspeakable loss. I can't help feeling sorry for those who remain—poor women! We must "forgive them, they knew not what they did."

I mean to get over it as soon as possible—already the dazed, nightmare feeling is over—and the sense of rest is coming. I must now work for my St. Mary's St. Nursery, till I leave the city. I have [not ?] near funds enough to carry them through the summer. . . .

PHILADELPHIA, *June* 24, 1890. PETER LESLEY TO HIS WIFE.

. . . A letter from —— ten days old lay here. It enclosed a proof revise of my *Forum* article.* It was very considerate, but very decided, that expressions in the article would injure the circulation of the *Forum*, which has received many contributors who have deserted the *N. American Review* since its admission of Ingersoll's article. He asked me to try to moderate some of my sentences or paragraphs. I have replied that I do not know how to do that, but that he can reject the whole; or he can omit whatever he pleases; only in that case I wish him to indicate the omissions by dots, thus . . . , as in the case of quotations.

I thought fondly that there was one magazine which could afford to admit earnest and calm statements opposed to orthodoxy; but it seems not. You know I can only write in one way. I fear that I will not be permitted again to publish my dearest thoughts and sentiments; for I am no longer rich enough to put them into books. But it doesn't matter.

The morning mail brought me your last little Minnewaska letter;—also from —— a note and galley proofs, with words and whole paragraphs marked for change or erasure. I have just made the changes and many erasures, and sent it back; but it is too late for the *July Forum*. I hated to make the article appear in such a maimed condition. No help. Wonder if we shall ever have a perfectly independent magazine, like the English *XIX. Century*.

Argyle's article, finishing his "History of a Conspirator," the infamous Wolfe Tone—now lauded by the Parnellites as one of Ireland's noblest patriots and martyrs,—is a most damaging blow at Parnellism and the Irish "National" cause. It is also —apart from that—*most* interesting and instructive reading. It is in the Duke's best style—unexceptionable.

Jessop's article on the English Poorhouses is *most delightful* reading. You will enjoy it hugely. All Jessop writes is first-class reading. He is one of the sweet, good, wise Tories. His attack on the Education Craze in England will furnish some apothegms to the men in Parliament.

PHILADELPHIA, *Sept.* 9, 1890. TO HIS WIFE.

. . . After all, enough of the unexpected is left to render life a very serious affair. Especially so to railroad travellers, and

* The Idea of Life after Death. By J. P. Lesley. The *Forum*, October, 1890, Vol. X., No. 2.

chiefly on the New York Central. It looks this morning as if the switchmen are desperate—no wonder, poor souls, with wives and children dependent on their weekly pay for bare bread, without trimmings to the table—and they called out on the assurance that they should win a great victory over the corporation of Diveses and Herods—and perhaps settle for once and all the future of their class in America. Who knows what strange wild talk has been going on in hundreds of little houses, shanties, sheds, beside switches, on box cars, and elsewhere? We who read all the literature past and current of the world, and look with telescopes of learning over the whole field—around the whole far horizon of human life—*we* cannot judge justly the disorganized brain excitements of the poor who were never educated, never disciplined to self-control, never taught how to think, and can draw no general conclusions from their itemized experience. . . .

PHILADELPHIA, *Sept.* 25, 1890. TO HIS WIFE.

. . . That article in *Littell*, on the new government of Germany, is well worth reading and reflecting upon. It is one of those rarely occurring outspreads of great historical facts and ranges of facts, which so few writers are capable of displaying to us readers, or so seldom feel called upon to do so if they can. I judge however that the amount of such *unwritten* statements is very great, but can only be got by personal conversation with the best thinkers and best-informed people of our day. This is what gives its superior value to intercourse with the best society of England. One looks over so great a stretch of human landscape, in so bracing a mental atmosphere, under so brilliant an illumination by the well-trained intellect.

In this case the whole false and cruel and selfish career of Bismarck is so well exhibited, and in contrast with characters like Cavour, and William the present emperor, to say nothing of lesser or less influential personages, that the glamour of princely success and power is dissipated, and one can place the great Charlatan on his real and proper level. But what is more satisfactory (for it is painful to see a so-called great man degraded by the truth, when it is told of him) is the hope, the competent expectation excited by the new turn of affairs in Germany, that the great mischiefs Bismarck's long life has brought upon the Fatherland may be and are beginning to be counteracted and cured. . . .

PHILADELPHIA, *Sept.* 27, 1890. TO HIS WIFE.

. . . You cannot imagine the depression of spirits which is produced by this fatal *FINIS* to my long work. Perhaps you felt the same when the last page of your Mother's memoir was printed. But you *can* sympathize with the heartlessness and want of courage with which I now regard the huge pile of MS. of my Final Report. How shall I ever begin to put that to press? . . .

BROOKLINE, *Oct.* 4, 1890. SUSAN I. LESLEY TO HER HUSBAND.

. . . As I was wandering about yesterday in Boston (oh, what a beautiful city it is!) I was so struck with the change from the old city of my youth. The wide and generous avenues of the Back Bay—the beautiful buildings, the rare trees and grass plots, and exquisite vines over churches and houses.—But, oh! how all the old homes and friends where we used to be welcomed so warmly, have disappeared,—the Reveres and Barnards, the Hillards and Ellises and Hales, all gone, either to the heavenly home or to country homes! As I walked along Tremont Street, that crowded mart, I thought of the beautiful old houses, and the windows at which I used to sit and look across the Common, and see the Charles River coming close up to the Mall, covering the whole Public Garden, and the wonderful new city that now extends beyond it. What wonderful changes in a lifetime! . . .

PHILADELPHIA, *Oct.* 9, 1890. PETER LESLEY TO HIS WIFE.

. . . Your affectionate and thoughtful letter of yesterday came quickly to me this morning. Do not depart for my sake from any of your plans. Do not hasten. Do all you wish to do. If I feel intolerably lonely, I shall go to Newburg and await you there. But I realize more forcibly every day my false position. I was made and educated to be a diligent worker. I have been an incessant workman all the years of my life. I cannot lead a contemplative life, still less a *dolce far niente* life. I cannot read all the time—for when I read I must write—but I must write for a purpose. But with these survey odds and ends hanging over me I cannot adopt a purpose apart from them. I am no longer strong enough to work and play together, to do two things at once. If the survey could afford me real daily steady employment in my office, I could go on happily and usefully for some years longer. But the stress of *responsible* thinking and *correct* writing I can no longer endure. I fear that I shall

be kept thus dangling between duties which I can no longer properly perform, and desires which I am prevented from gratifying in a legitimate and useful manner.

The temptation to resign my commission as State Geologist is often very strong. But you know my conservative temperament, how I hate and dread and mistrust all changes. But it is a question whether any old man has a right to live dog in manger to the detriment of public interests. The young men want places and opportunities for profit and distinction. A new man at the wheel may change the ship's course to the advantage of the voyage. A new General may commence a better campaign. If the Legislature should make a new appropriation, the only benefit my being State Geologist would be to it, would be my calling into service the trained hands again,—Chance, d'Invilliers, Carll, if I could get them (an important if), and I should perhaps be like a new premier who found himself unable to form a cabinet.

But, oh, the weariness of it! as I look forward. Pity me, my dear, for I am worked out; *épuisé*, like an old oil pool; *abattu*, like a ruined castle; unfit for the road, like Henry's horse Prince, —fit only for the pasture. I often see Neander on his death-bed and hear his murmur of "*Ruhe, Ruhe.*"

Yet rest brings no relief while the brain retains its vigor, and is continually stimulated by passing events and books and magazines. No, what I crave is first Liberty, then Irresponsibility, then my Library. . . .

No. There must be a change to some gentle work—daily work at that—uninterfered with by responsibilities and cares. For instance, this call of Secretary Edge, of the Board of Agriculture, on me for a short report as the official geologist of the Board (a sham of itself), harasses me from day to day. He wants something that respects or relates to Agriculture. Geology touches Agriculture only in *limestone* and *water supply*. I have a few things, unpublished, on these two subjects, but they are not worth reporting; yet would require three or four days of laborious writing.—I have plenty of appendix work on hand—but I dare not begin it because my Final Report must precede it in printing.—I have plenty of Final Report work on Chapter I yet to do—but have not the courage to undertake it. Yet I am pledged to put the First Chapter to press this fall. I am like Daniel among the lions; or Jonah in the whale's belly,—the weeds of the deep are wrapped about my head. . . .

Oct. 10, 1890. To his Wife.

I have been going carefully through the Introduction to my Final Report, and am disgusted and disheartened with its poverty and *gaucherie*. I am not fitted for that sort of thing. It will be the chief failure of my life. You may imagine how this kills my zeal for its publication. If I were younger, I should rewrite it, and then it would be no better. There is but one in the world who could write it, and that is God—or our dear old friend Sir Charles Lyell. Even Archibald Geikie couldn't do it. But these foolish people will have it. So the ship, being built, will be launched, and will sail, with the Board on board, and they will all go to the bottom in it together, and I along with them. Why was I born to be such a castaway?

No more this rainy morning. I must go hunt up d'Invilliers. Why won't they let me finish my Fossil Dictionary? That I *could* do. . . .

Philadelphia, *Oct.* 20, 1890. To his Wife.

. . . Your kind note of Saturday has just come, and I cannot settle myself to the day's work without pretending to give you a morning kiss, two hundred miles off. The day is cloudy, but the newspapers promise sunshine; and newspapers always tell the truth simply and conscientiously. At all events, the sun is really up there behind the clouds, just as God is up there behind men's troubles. Prince Kropotkin's article in *XIX. Century*, on the Socialism of Animals, is the freshest and most invigorating food for thought and hope. It really opens a grand vista forward. Much new in it, moreover. Fine spirit. Brave soul. Took back P——'s infidel book last evening, . . . and had a religious talk with him and the little Doctoress. Sorry for any man who says straight out that he believes there is no God, and all he can do is to live as well as he knows how. Told him I thought morality and religion were different—were related to different functions of a man's being. He expressed great pleasure in talking with me; and I suspect that everybody has been clubbing him for an atheist, and that his soul is black and blue all over, and hurts.

I spent three hours yesterday over Chapter 2 of my MS. Summary Geol. Pa., and laid it down, after innumerable interlineations, disgusted and discouraged with its badness. . . .

PHILADELPHIA, *Nov.* 4, 1890. PETER LESLEY TO HIS SON-IN-LAW HENRY.

. . . I have just voted the straight Republican ticket as I wish all Republicans would do. . . .

A day of great excitement. Election day all over the U.S. A phenomenon more wonderful than an earthquake over Europe, or an eclipse of the Sun. A sort of Century plant flower of the last and highest civilization. An impossibility in any former age. All the so-called terrible and fatal follies and sins of the politicians are mere fly-specks on the painting. Flies will always speck works of art, but they wash off. Here we have human nature acting, and also thinking, wishing and willing, on the broadest scale. The unity of action in the drama of an election day is its central marvel. But its glory is in the predominance of the inherited instinct of obedience of the individual will to the decision, not of another more powerful and hostile individual will, but to the majority will of the whole.

I am reading Taylor's book on the primitive Aryans which Charles was good enough to send me—and with the greatest pleasure. I see that Dr. Brinton has got out his lectures on "Races and Peoples," which will be capital reading. . . .

PHILADELPHIA, *Nov.* 8, 1890. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . I have never thanked you for your kindness in sending me Isaac Taylor's Aryans. I am just reading the last pages, having had extreme pleasure in every page of the book—pleasure with a spice of gratified malice over the utter discomfiture of my old enemy Max Müller, one of the most famously successful old shams that ever crowned himself Augustus in any of the empires of human knowledge. Any Englishman who felt as I have felt about him would call him "that blasted old polygamist, with his harem of dawn maidens." Dawn maidens, forsooth, one of which he dressed up in the stage character and with the name of Hercules! But I have sinned in philology quite as damnably as ever Max Müller did; and they that live in glass houses must not throw stones. Müller's exquisite English—his lovely imagination—his devotion to his science—the stimulus he gave to learning—all these will secure him immunity from punishment, and will in fact and in right procure him a just immortality among the learned men of this XIX. Century.

I have been much occupied of late with the Egyptian ANX—

symbol of life. I mean in bed—and walking to and from the League. I am too busy with the work—the last works—of the Survey, to indulge in that luxury of useless studies to which I owe the greatest happiness of life; and too old and feeble now to write out what I think. The reading world may congratulate itself on being spared another book. But now and then I get a glimpse of some little discovery—a tiny momentary shooting star of etymology, only suggestive of infinite space filled with such. What is it that makes *analogies* so bewitching to the human intellect? I remember the thrill of delight when it occurred to me one sleepless night that the Hebrew Enoch was the Egyptian and then that, as Adam and Seth were the great old gods, father and son (chronologically only), ATUM of Heliopolis, and SETI of Tanis, so Enos was the ANX—the enosh, living being, man, of the Hebrew Scriptures. . . .

If so, the two German forms Ich and Ish correspond to the two southern forms Ank and Enosh.

Kreutzer was on the threshold of this idea when he taught that Ik, Ich, was adopted for expressing a man's personality, because it was the *innermost* sound that could be made in the human body. As Ex was invented to express the rush of voice from within outward, and so the issuance of anything from anywhere,—K—S. Certainly we have the same effort to express personality by inwardness in the word σμς, me. And in such a word as *amor, am-are,*—it is the sacred interior soul symbol OM of the Hindus.

There, there, what an old fool I am to be dreaming over my old dreams, with these variations. The present claims us—not the past. Let bygones be bygones, is a good rule. It has been often remarked that the diaries and letters of great men (and little men) which have escaped destruction and been published in our day, scarcely ever mention the great events of the times in which they were penned. Here am I writing such trifles of fancy, while the roar of Republican defeat still fills the air.

Would you like to comprehend the event in this State? Today's revised count gives Pattison the Democratic Governor 17,000 plurality, and at the same time the Republican Lieu[tenant] Governor Watres 17,000 plurality and the Sec. Int. Aff. Stewart 19,000. Thus Delamater fell 36,000 votes behind Stewart! Why? For three reasons.

1. D. was Senator Quay's man and did not repudiate the fact, but openly indorsed Quay, the great Boss.

2. Delamater and Quay were both publicly and persistently accused of malfeasance in office, etc., and neither of them appealed to the Courts to clear their characters; whereas the moment an editor accused Pattison, Pattison had him arrested and tried for libel.

3. Delamater represented the last Republican Legislature, which refused to pass bill No. 284 for the better ventilation of mines, and he was a member of that Legislature, and very powerful in it. Consequently, before the Election day came, many (if not all) the miners' Unions passed resolutions to vote the Democratic ticket (for governor). This fact is little known and has not got into the newspapers.

4. Pattison is an ardent Methodist, and Methodist Sunday School man. Some of the Methodist preachers last Sunday enjoined on their flocks to vote for Pattison. This is an old and well-known Methodist policy and principle. In my younger days, on the first survey, and afterwards in my colporteur work, I saw a great deal of the Methodist churches and class meetings, and found that all the families in a village or town were religiously bound (compelled by their class leaders) to buy their shoes of the Methodist shoemaker, their sugar and tea at the Methodist grocery store, etc.

No wonder the political bosses' and wire-pullers' predictions of the result of the Election were like those of the false prophets of Samaria. These *sub rosa* workers out of destiny—these hidden from public observation causes of public sentiment—these non-newspaper news events—in Pennsylvania, no doubt have their analogies in the other states where equally unpublished forces were at work among the millions of voters.

No doubt of it—the McKinley Tariff Bill had a great effect. Not because its working was, is, or will be for some time understood, but because the shopkeepers all over the country discounted its operation, and raised in advance the price of all the common commodities. People who never could think broadly, found that the dollar they took to a grocery store would not buy as much as it had done before the act was passed, and there were plenty of fellows around (who knew and could know just as little about the real nature and operation of tariff) to tell the man with a dollar that the tariff bill had made and would continue to keep his dollar at less value. In Delaware there was a ridiculous exhibition of this phenomenon.

For three weeks before the election, the tomato growers were getting more and more excited about their tin cans. Massey

went to a place in South Delaware to make a Republican stump speech.—"Whatever you say," said one of his friends, "don't forget tomatoes." "All right," he replied, "I have a copy of the McKinley bill in my pocket."—In his speech he asked the crowd, "Has anybody said anything about tin?" "Nary one hasn't said nothing about anything else for a month," shouted one old farmer. "Well," said Massey, "they tell me that the price of tin cans has gone up, and in fact you can't buy them at any price that'll pay. How is that?" "True enough," was the response. "We will have to lower the price of our tomatoes, or not sell them at all." "And you think the tariff bill has done that?" "Yes." "Well, I shall be very much obliged to any gentleman in this crowd who will explain to me how a tariff bill that doesn't go into operation in its clause on tin, until June, 1891, can affect the price of your tin cans in October, 1890." "Is that so?" they asked. "Certainly, I will read you the clause." And he read them the clause.

"Massey," said I, "how do you account for it yourself?"—"Why, Mr. Lesley," he said, "the fact is just this. Our own Delaware tomato growers make the best estimate they can of the probable yield, as early in the spring as they can, and regulate their orders for the fall delivery of the cans, accordingly. The tin can factories work on these orders between planting and gathering, and get done with the manufacture—having laid in *their* stock of tin in advance to suit the amount of orders. Well, it so happened that the tomato crop was enormous this year. When all the orders for cans were filled—there was a large surplus of tomatoes and no more cans. Of course the price of any extra stock of cans went up; and snap orders for additional cans would not be accepted unless at higher figures. The tariff bill had nothing whatever to do with the situation. It was the sun that was to blame—not McKinley; the weather, not Congress."

But every Democratic stump speaker in Delaware before Election laid the high price of cans to the new tariff bill—which would not operate before next year's orders for cans were given, and next year's crop of tomatoes was half grown.

The new tariff bill will of course raise the prices of most articles at first—but in the next year or two competitive manufacturing will depress prices again below the normal, and in 1892 the cyclone will be not a Democratic one—but a Republican one—as has always hitherto happened. *Toujours le même chose.*

The new tariff, like all its predecessors, had one very bad feature—it is not absolutely and universally prohibitory.

A prohibitory tariff would do four kinds of great work for the nation:

1. It would destroy our commerce, consequently cripple the commercial overgrowth of the seaboard cities, those nests of misery, vice, bad politics, and demoralizing luxury.

2. What luxuries came from abroad could only be used by fewer numbers; simplicity of life would be fostered both in city and country; less revenue would flow to Washington; less opportunity for corruption and waste. Taxes would have to be *direct;* making the millions feel what they had to pay; and protest against every useless and evil expense; so political intelligence would be increased, and family thrift cultivated.

3. All things would be made inside the nation; competition in manufacture would soon bring down prices to a minimum and keep them there. Thrift would thus be made easy and comfortable.

4. At the same time, wages would necessarily arise to a normal, and be kept there in spite of emigration and progress in population (native), because the more people, the more things; and the more things, the more making of things; and the more making of things, the greater call for skilled labor; and the greater call, the less supply; and the less supply, the more to pay.

I repeat the one thing we lack is a prohibitory tariff—absolutely and completely prohibitory. China has always been the wisest country in the world—as to the arrangement of human affairs.*

There, my dear boy, if you are as sick and tired of the whole thing as I am, you will be glad to reach at last the *ultima thule* of this epistle, the hand and mark of your loving father-in-law. . . .

PHILADELPHIA, *Nov.* 30, 1890. PETER LESLEY TO HIS DAUGHTER AND SON M. AND H.

. . . I am very lazy, and shirk every kind of work that is evitable. I read most of my spare time, and fortunately received from Porter and Coates, a day or two ago, the third volume of Renan's *Histoire du Peuple Juif* (or Hebrew). The first chap-

* This letter illustrates the vividness of my father's economic opinions (for the time being) and his extreme manner of expressing them. I am not at all sure that he would not have repudiated this theory some other day, quite as vehemently as he announced it here, if another side of the question presented itself to his attention.

ters I find very interesting, but neither so exciting nor so brilliant nor so learned as the preceding first and second volumes. But it will grow as it goes, no doubt. . . .

I see by yesterday's reports from Nevada and Dakota, that another Messiah has been found, a Capt. Jack Walker, who promises the Indians an avatar, on a high and sacred mountain, on the West shore of a lake. The present Indian "Ghost Craze" illustrates very well the traditional prediction of Jesus, that soon after his death many Messiahs should present themselves in the Levantine world.

How hard every race struggles against extinction, while the changing circumstances of its old habitat grinds it slowly but surely to powder! All the more wonderful is the evident immortality of every race which inhabits an unchanging district of the Earth's surface. The present Fellahin of the Nile valley are the lineal unaltered progeny of the subjects of Totmes and Amenoph, and are absorbing and destroying the Arabs and Turks of to-day, just as their forefathers absorbed and destroyed the Hyksos element, 2000 B.C. to 1400 B.C. The Nile and the desert never vary in their Nature rôles; and so the human "supes" of the stage are always the same, also. But it is incomprehensible—this Type Genius—what is it? This thing which is no thing; this phenomenon which is nothing but an abstract idea; which yet realizes itself, propagates itself, insists on living unchanged from generation to generation, from millennium to millennium. What is it? Where in each physical form does it abide, reside, and rule? What becomes of it, when the body is resolved into airs and earths? How does it pass from sire to son, and always through the mother? And how can it so divide itself that it can at the same time inform both the sire and the son, both being yet alive, side by side? The nature and powers and manners of this mysterious "Forming Form" has been the central mystery of all philosophies; as it is the central cause of all generic and specific types.

But if this Type Genius is so immutable under ordinary circumstances, why does it change when circumstances change, and how does it manage to alter forms? Or, does it really?

Either there is but one *form force*, or Type Genius, *i.e.* God; or there are many; *i.e.* Tribal gods and family deities. In the latter case, the ancient superstition, that when a tribe became extinct its deity perished, becomes philosophy; or rather would if reversed, *i.e.* if the assertion was that when the tribal deity or Type Genius fell sick and died, or was overcome to death by

enemies, then the Creatures of that type succumbed to circumstances and became extinct.

Vain philosophy! It is all of it like peering into stellar space with an opera glass, in the hope of discovering something not yet known.

No wonder there have always been zealots in science, people so mad with curiosity, that they have actually longed to die before their time, simply to get nearer to this mystery of mysteries of the whole University of worlds and living beings.

For myself I expect to never know more than I know now about it, that is, nothing; nor do I care to; for I conceive that my knowing more would do no good either to others or to myself. The greatest end of life is, evidently, not knowledge, but love. The universe was made by some great Lover, and Love maker; and his ends are answered quite as well in all the least intelligent districts of his dominion as in his realms of finest intelligent creations.

I shall send you the November *XIX. Century*, which contains the continuation of Count Kropotkin's article on the sociality of animals, and you will find it so charming that you will say you never read anything more delightful.

I am tired. Send this to Charles and Mary, for I can write no more. . . .

PHILADELPHIA, *Dec.* 13, 1890. PETER LESLEY TO HIS DAUGHTER AND SON M. AND C.

. . . How are you, this horridly cold day in your Arctic home, dedicated by name most inappropriately to that fieriest old sub-apostle, who insisted very wisely and justly that, nevertheless the "sub," he was not a whit behind,—a soft way of putting it that he was a long way ahead, of the chiefest of the apostles. What a furious, lovely, long-headed, self-denying, generous old zealot he was! It required no notice that he was a free-born Tarsite child of Pharisaic Pharisees. I assure you, my dears, that you will never come to comprehend St. Paul until you have read the Third Volume of Renan's "History of the Jewish People," and gone deep into the chapters which depict the animus and manners of those old Pharisees, "The Men of Hezekiah" (Prov. xxv. 1), the *Anavim*, or clique of Isaiah, who were the Puritans of that Seventh Century B.C.—who were put down at the death of Hezekiah by the Aristocratic Sadducean political and military party, under the fifty-five-year-long reign of Manassas, the two-year reign of Amon, and the first dozen years of the reign of

young Josiah,—and who then came back into power, and captured government, people, religion, morals and manners, at the tremendous puritan revolution effected by Jehoiada, Mrs. Hilkiah, and Sir Saint Jeremiah, the fiercest, saddest and most inexorable of all God's Cromwells.

Renan's astonishment that Jahvism could fail of extinction during these deistic seventy-five years ought not to have led him into the statement that it is only explicable by the unique hold-on genius of the Jewish race. For we see the same phenomenon in South Ireland to-day. As Wickliffe lived again in Knox and Cromwell, and again in Wesley and Whitefield, and is living once more in General Booth to-day, we learn how inextinguishable is the divine fire in the soul of every race. Every Vesuvius, however long quiet, bursts again into eruption. The human heart is always of one pattern; and when the altar smoke ceases from the Temple altar, it still curls up every cotter's chimney in the land. In fact, I fear you live too near the lava beds of the Columbia River country to be quite safe. Our young new states will have a devil of a time some day.

Here comes the health-giving, joy-inspiring sunlight again into my study window. I must draw down the white curtain to temper its blaze, as we draw this cloak of flesh and blood around our souls to shield us from the Deity. No man hath seen God at any time, in any age; the Son hath revealed him. This is the excuse of Orthodoxy,—of every Idolatry.

I must send you a wonderful description in *Littell's Living Age* of the most holy and beautiful and curious of all Buddha shrines, that of Rangoon; and of the great festival of the elevation of the new *htiu* (or great umbrella of gold plates, set with jewels, given by the King of Ava) to the top of its spire, three hundred feet from the ground. I never knew why so many packages of gold leaf were offered to Buddha by pilgrims. It seems that the entire pagoda is regilt every few years. That seems to me like an archangel taking a periodical Turkish bath, "whether he needs it, or not."

. . . By the way, I forgot to say that Hezekiah's Anavim were the ancestors of the Ebionites, of whom Jesus said Blessed are the poor, for they shall inherit the earth; just as the Anavim Psalm writers of Hezekiah's day sang in Psalm 25, 13; 37, 9; etc., etc. It was a stupid gloss of the Third Century to add Poor *in spirit*, which means nothing, but a lack of spirit; whereas they only are heaven-born and earth-blessed who are *filled* with the spirit.

I wonder that, in the rage for giving Hebrew names to Puritan children, no one ever seems to have thought of calling a son Ebion. Yet that horrid Ichabod (Departed Glory=Darkness) has been the name of thousands of Anglo-Saxon victims of cant and ignorance.

I pity the babes. Guardians plenty, but few friends.

The dear mother is very active, and full of life and good works and kind words for everybody.

I have been very desolate these two days since Margaret disappeared—like a sweet dream. She comes, and like Flora, around her feet the flowers bloom in December. She goes and they all die together, and snow covers the earth. But the blessed Mother I have always with me (and the Poor)—and also M. Renan's third volume. So I get along.

Occasionally, also, at the end of the week, a roll of d'Invilliers' proof comes down from Harrisburg, and that amuses me. Every afternoon and evening I play at billiards, and that is a wonderful refreshment. I trust to find a Union League in Paradise; in the faubourg, if not within the walls.

Love to both of you, and four distinct lots of love to the babies. . . .

PHILADELPHIA, *March* 25, 1891. PETER LESLEY TO HIS SON-IN-LAW HENRY.

. . . Thanks for . . . Trumbull's *exposé* of the Chilian revolution. I felt sure it was something of that nature, and I am not astonished that my dear David's boy is a member of the Congress on the side of the Conservative (*i.e.* in this case the progressive) majority. The father * had a large hand in making Chili free and prosperous.

. . . I am preparing two or three papers for the A. P. S. Proceedings, two on Egyptian and Hebrew Etymologies, one on the Grapeville gas well decline, one on the Bucks Co. trial well boring in Ben Lyman's New Redfield.

I read last Sunday evening my discussion of the preparation of Greece for Paul's coming. . . .

PHILADELPHIA, *March* 26, 1891. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . We have missed them [the children] proportionately and often longed to hear their little voices about the house. Yet mostly we dwell on the delight of having had them, and the hope

* David Trumbull.

that such visits may be oft repeated. Whenever I have felt strong enough to do anything, I have been helping Helen Jenks to find a Committee to visit the insane paupers in the Almshouse, and supply them with work and entertainment. Of course I can help her in no other way than by inducing others to join her, and I have had pretty good success in that. It is a noble work she has undertaken, and she has got at it in a wonderful way. I wish I had strength to tell you about it. . . .

PHILADELPHIA, *April* 15, 1891. PETER LESLEY TO HIS DAUGHTER MARY.

. . . How full your daily life is! I who now do nothing at all, wonder how you can do so much. I wish I could see it all in the doing. We should be so happy and peaceful together. Oh, these bonds! Man weaves about him his life cocoon like a worm, gradually shutting himself into his coffin of affairs, until some day the appointment comes, and he issues winged, and vanishes away in the air of the unknown land. The cocoon is left to rot and dissolve and vanish also. What are our elaborate homes, libraries, investments, business occupations, confirmed habits of thought, desire and doing, but a slowly and finely woven cocoon, from which the soul must shortly emerge, and all which it will forget forever? And why can we not be more free of our furniture before death sells it at auction for a song? Here sit your mother and I, longing to go to you and cannot get out of our cocoons. She said yesterday to me: "Peter, if it were not for leaving you alone I should go and spend a fortnight at St. Paul." "Go," I said, "and I will be contented here." "No," she said, "I cannot abandon Mr. Micawber." "Well," I said, "it is a little early yet. I noticed in the weather report yesterday that the thermometer was at St. Paul only 34°. That is pretty cold. And the grippe is a dreadful epidemic at Chicago. And the R.R. cars are frightfully heated up. And the journey is one of two days and two nights; and you are sixty-eight and I am nearly seventy-two years of age." "Yes," she said, "and it would be very expensive." This last seemed to me a succinct statement respecting the cocoon.

. . . I should like to send you my paper on the preparation of the Greek world for the preaching of Paul. You would both of you like it.

. . . Yes, that coat of arms. I wish you could tell us what it is. I sent it to you to stimulate your curiosity. It was meant for my boy Lesley, whose grandfather's grandmother, Sarah

Allen (born Rand, at Charlestown, under Bunker Hill), had some ancestor who had a coat of arms in England, and this is that, or that is this, which you please. If it were an archæapteryx, preserved on a slab of Solenhofen lithographic stone, I could perhaps advise you more lucidly. Cousin Sarah Alvord (born Wilson), before dying, wished it to be sent to *me*, saying that your uncle Joseph Lesley knew all about it. But I cannot remember anything that he may have told me about it. You know I am not much of a genealogist, and in fact would much rather that some kind friend would give me a new overcoat than the most brilliantly famous coat of arms that ever was emblazoned by the *Herald's* Office in London. *Quieta non movere* is a good motto, as Parson Dale told Squire Hazeldean,—had the squire but heeded the words. And my respect for coats of arms has not been heightened by the London scandals of late years, although they are nothing to the scandals of the courts of the Stuarts and the Georges. When Mrs. Thrale pleaded that one of her forefathers had been hanged, Dr. Johnson rebutted that he had no doubt that many of his own ought to have been. Besides, a coat of arms takes up a foot square of wall where a lovely picture might hang. Having seen the queer thing, you had better sell it to a bric-à-brac man for twenty-five cents, and forget all about it, lest some rapcallion should claim cousinship to Lesley when he has become a man. *Quieta non movere.* . . .

PHILADELPHIA, *April* 25, 1891. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . I champ the bit, waiting to start on a new career of proof-reading. You can hardly imagine the ennui I am now enduring. I can settle to nothing in the shape of regular work. I have always worked easiest under high pressure. I wonder how a locomotive feels, when there is no water in its belly and no coal in its firebox. By the by, did it ever occur to you what an out-and-out teetotaller a locomotive is? Really it is an example for humanity.

Emma Ware arrived yesterday morning, and went to Bryn Mawr to see "Iolanthe" performed by the girls at College there. I sat up for her until long after midnight, and then went to bed. She came back after breakfast this morning. *I* have not come back yet. The small hours are worse for me than southern buckshot. But I got to the rescue of Violante by Harley l'Estrange, before I closed the book and turned down the gas, and so, I slept soundly. But I am a very little insane this morning in conse-

quence. So I have taken out of my S. W. Library shelves the dear old wise and foolish Bryant and enjoyed an hour's discussion of the Edomite descent of the Phœnicians, etc., etc., etc., with lots of Greek quotations (*in the text*, bless him!) and a rare mess of Egyptian nonsense.

Lord, how little our great-grandfathers knew! Don't preserve this letter, or my great-grandchildren will quote the last sentence to my eternal confusion. Knowledge is just like the fashion; it changes its aspect every generation—if not oftener. How supercilious the recent excavations along the Euphrates and the Nile have made us! Yet, my dear Charles, when I read "Bryant's Observations" in folio, published at Cambridge, England, in 1767, I fall into a very low frame of respect for the *genius* of my own day. What glorious old fellows those were, who could win steeple-chases on donkeys! It is the old story. The seat of wisdom is the Imagination, not the Understanding. They could build with unburnt brick nobler edifices than we can with granite and serpentine. They had the eyes of eagles, and wore no spectacles. They could pick off a turkey's head on the top of a pine-tree, with an old smooth-bore.

Everything nowadays takes the style of *la science raffinée*. We quote—they invented, created. Supposing they made a thousand blunders—so did the builders of the Doge's palace. What of it?—their very blunders are more beautiful than our facts. Damn facts. They are the bacilli disease-mongers of the human soul. What the human race wants is *fancies*. This is the only diet for a healthy robust individual soul. No soul can digest facts. You might as well feed fowls on sawdust and potato skins, and expect them to lay golden eggs. Had it not been for Arkism, I should be a rich fool and a lost soul. I would rather know that the god Mars was named Ἄρης from Ari (אֲרִי), a lion, with all the vista of Græco-Phœnician conjectures that that etymology raises—than how to calculate the return of Biela's comet. . . .

PHILADELPHIA, *May* 10, 1891. PETER LESLEY TO HIS DAUGHTER AND SON M. AND C.

. . . Your life is so rich that it does not want for this or anything else. In fact life is everywhere too rich for good digestion,—too much butter and honey in it,—too many hearty meals a day. Only the abstemious live long. Life is sometimes worn out with care and overwork; but usually with happiness and pleasure, and a surfeit of good things. I have been reading Sayce's Hibbert

lectures for many days, and other books of kindred character, Delitzsch's New Commentary on Genesis, an Egyptian Primer, Allen's "Hebrew Men and Times," etc. I am struck with the incessant violent boiling of the world's cauldrons in all ages from the beginning,—a good many always on the stove at one time, and the fire never goes out; so that history is like the kitchen of a great restaurant, in which a score of elaborately varied menus are being prepared, night and day; of all available materials, for all tastes; but, after all, the number of foods is quite limited; the variety of dishes is more apparent than real; and the difference of tastes is but slight; tastes being rather acquired, and compelled results of the taste of the cook, than stubborn inherent characteristics of the guests. We go often to the same restaurant, and after awhile are reduced to subjection by the Chef. So with politics, so with religion, so with morality, so with scientific, literary and æsthetic taste. History teaches no lesson plainer than man's adaptability; mankind's, I mean. Therefore a whole race will come to recite from one Prayer Book.

I have just made a discovery. There are two Delitzsches, Franz, who writes the Commentary on Genesis, and Friedrich, who is so often quoted as author of the curious "Where lay Paradise?" (*Wo lag die Paradies?*) Now I have to learn which of these is the famous Assyriologist. I suppose the latter. The Commentator is a Catholic. In a charming little dedication to the public he abjures Darwinism, and says, "I am not a believer in the 'Religion of the times of Darwin.' I am a believer in two orders of things, and not merely in one, which the miraculous would drill holes in. I believe in the Easter announcement, and I accept its deductions." This is lovely. But it makes a scientific reader feel put upon his guard. I find the book highly suggestive, but have already felt its dangers. In fact *this* cook has some copper boilers on the stove, and one feels like asking the waiters to first taste the dishes as they are set on table. The delights of danger culminate in tiger hunting, and in archæology.

It is exasperating to see the names of so many authors, and the titles of their learned works, in the foot-notes of the books, and to feel the impossibility of getting at them, even in so large a city as this, furnished with huge libraries for public use. But, after all, what good would come of reading them all? No farmer of prudent mind cares to have a larger wood lot than will supply his woodshed. A Berks County farmer might as well purchase the whole south flank of the Blue Mountain, in the vain expecta-

tion of personal benefit. Books stand and decay upon the shelves of a private library, as the finest trees die and rot in the forest. The owner of one Connecticut Valley Elm is better off than the owner of half the Adirondacks, or old Tom Ridgeway of Delaware, who purchased 300,000 acres of forest land in Elk and Forest and Venango counties, Pennsylvania, and never cleared but one 300 acre farm in it, nor built but one house, for his agent Gillis. The house was struck by lightning while I was sleeping in it, at midnight. Many a poor scholar has met a worse fate in a great library of books; for I was only stunned and frightened, not made insane. The Lord preserve (if he can) the man of too many books! But, then, I might exclaim so of the man of too many houses; or the man of too many children; or the man of too many certificates of stock. . . .

PHILADELPHIA, *May* 24, 1891. PETER LESLEY TO HIS SON AND DAUGHTER C. AND M.

. . . It is a gentle cloudy day, very quiet and peaceful, slight showers now and then falling, to hint that Nature is not forgetful of the coming harvest.

I sit at the desk in the parlor, and can hear the organ in the church at the corner. Your mother has been reading to me since breakfast time chapters of old Dr. Edmund H. Sears' half novel, half genealogical history, "Pictures of the Olden Time, as shown in the Fortunes of a Family of the Pilgrims," published by Crosby, Nichols and Company in Boston, in 1857, and now out of print. It ought to be republished in some Northwestern city, like St. Paul, and would have great vogue, I am quite sure. Its picture of the Relief of Leyden alone ought to make it famous.

Your mother borrowed the book from Mr. F. B. Sears of Boston, the author's son, in one of the banks of Boston. His father was Unitarian Minister at Wayland, Massachusetts, and a saint. He wrote "The Heart of Christ," a beautiful little book which delights the Orthodox Christians of New England, and many of the beautiful hymns in the Unitarian hymnals. J. F. Clarke was fond of his writings. Certainly this one which we are reading is of the best type of religious romances. And I mean by that, that if I were to attempt a romance, I should try to imbibe its spirit, and even its style, although in the technique of style it can be improved.

The modern romance is not created on an elevated plane of feeling. Even when dramatically powerful, or analytically fine, or classically pure, it seems to flow from an iron rather than

from a gold or silver pen; rather I should say, most novels are excellently written with a clay stylus on wax. Surely authors ought to write romances only after they have been asleep and seen angels in their dreams, and avoid writing after they have been buying and selling stocks, eaten hearty dinners, or been to a varieties theatre. The novel is the most powerful educational tool of our age; and to make it work perfectly and turn out the best work, every care should be taken to make and keep it in order.

. . . I have just looked out of the back parlor windows. The yard is the loveliest bower of verdure, all the walls of the surrounding houses covered from soil to roof with ampelopsis and ivy vines, and great festoons arboring the alleyway. The trellis is also a screen of exquisite foliage, tipped with gold by the sunshine glinting on the wetted leaves.

A little solitary rosebush stands at the end of the little oval, and at its top swing two red roses, the girls' delight. A dozen buds are ready to take their turn, like instruments in an orchestra. These are the pleasant things with which the world is filled. Solomon in all his glory was not arrayed like one of these. Like Solomon's their glory falls to them by inheritance. They spend no long weary life in amassing it. They have no business cares. Each one helps all the rest to perfume the common atmosphere. Why is there so little public spirit among men? Yet the aggregate of public spirit is rather great than small. We have no cause to complain. Each man does so much for his family that there is not so much left as one may suppose for any one to do for the whole community of families. Yet, were I a millionaire, I feel sure I would find at least one fine thing to do for the city—open one little park—build one campanile—keep a-going one good music hall in Christian Street. And just this your millionaire mother has been doing for ten years in St. Mary's Street. You ought to hear her talk about it. You ought to see the babies in it. It is an ideal thing. One of the pleasant things with which, after all has been said, the world is either already full or is filling fast. The grand good last days are surely coming. Republicanism universal, general intelligence, unsuperstitious and uncontentious religion, ordinary virtue, inexpensive pleasures, wise public spirit—these are the growing commonplaces of the approaching—very slowly approaching, Millennium.

The only anxiety I feel, comes from the threatening growth of population. Think of it. The population of India (British) has grown in ten years from 198,500,000 to 220,400,000, *i.e.*

22,000,000! In all India, from 251,000,000 to 282,000,000, *i.e.* 32,000,000! Lower Burmah [*sic*] as the population of Pennsylvania, 4,526,432, of which the increase since 1881 has been 790,000.

War, pestilence and famine are nature's remedies for overpopulation. But war and famine look played out factors. Pestilence remains in unchecked activity, because it breeds in swamps which cannot be drained, and works in slums which overpopulation multiplies. We must put our trust in Beelzebub, the god of flies. Flies abound during a pestilence, for they are the scavengers of the air, and live on microbe germs, invisible to man. Hence pestilences are worse in winter, *i.e.* the chronic endemic pestilences. [My father did not live to learn the newer theory of the spread of disease by insects].

But I was looking about for pleasant things to write about.

Did I mention in any late letter the archæological sensation of the day, Dr. Charles Waldstein's discovery of the tomb and skull of Aristotle? Waldstein took Goodwin's place as director of the school at Athens. No, I am not sure of that. At all events he is director of all excavations, and of the Museum too, I believe. At any rate he has been digging at Eretria on the island of Eubœa, and has made out the city walls, etc., of several ages, as at Troy, and at Lachish, and the lines of private tombs along the roads leading from the city gates into the country, especially the high road to Chalcis.

Yes, he *is* director of the American School of Classical Studies at Athens, and in that capacity received a concession from the Greek Government to excavate at Eretria. Jan. 1890 he began with a lot of students. . . . [A long and detailed description of excavations follows].

PHILADELPHIA, *May* 26, 1891. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . There is something very lovely in these quiet days, that Father and I sit here in the front parlor with our books, I reading aloud to him and he talking and explaining as you know how he does. The windows in the back parlor are open, and we look through them on a vision of beauty. For the Wistaria and Ampelopsis have taken complete possession there, and hang in most graceful festoons, and you cannot see the old back buildings of Pine Street at all, but only a sea of green depths that suggest forests to an imaginative mind. To Catharine and Ellen, who live in the back yard all summer, and take great care

of the vines, it is really a Paradise. I never would have believed such a small shabby yard could ever have been made such a thing of beauty. . . .

NEWBURG, *June* 2, 1891. PETER LESLEY TO HIS DAUGHTER MARY.

. . . It seems that I have a bad reputation, traditional in the family, for never carrying out a plan to consummation; in a word, shirking the act when the time arrives for acting. So, none of them (as it now comes out in plain words) believed that I would escort the Lady of the Manor House to her destination. She says, with her queenly smile, that she is proud of me.

. . . It was a very long, tedious and tiresome ride, from 12.44 to 6 o'clock. The country was in its prime of summer, but somehow not so beautiful to me as the little back alleys of Philadelphia, through which I am accustomed to saunter and dream on my way from 1008 Clinton Street to the Union League house in Broad Street. I love the little streets and little houses and little people living in them. They seem very near to me. I was born in a little house, and you were born in a little house. The hovel and not the palace has been my habitual home all through my business life, my student life, my love life. I prefer old shabby books to read to quartos *de luxe*. I hate to make my boots shine, and would be miserable in a silk hat. The exquisite beauties of nature issue from mud; and no fossils are so bewitching to the eye and mind as those one cracks from the native rock with only a half cleansing. Think of the royal gardens at Versailles, and then turn to this place of H.'s in its unkempt loveliness. How can mankind grow artificial, when nature is the mother and nurse of the highest art? Simplicity means cleanliness; but nature is neither clean nor simple. Labor is not cleanly. Art is not cleanly. The home can never be kept clean, but is always being cleaned up, and instantly relapses. There is plenty of dishonest filthiness, but also plenty of dishonest cleanliness. In fact I feel a standing and hereditary—I may say æsthetic—fondness for natural dirt, and am glad to see in my daily walks, both in city and country, that the mass of mankind are usefully and contentedly dirty. Young people especially have no right to be spick and span neat all day long. They should wait for that privilege or luxury, if it be privilege or luxury, until they have reached the latter end of life, and the work of life is nearly or quite for them ended. . . .

PHILADELPHIA, *June* 9, 1891. PETER LESLEY TO HIS WIFE.

. . . I am in such a state of happy excitement between the governor's good sense in signing our little bill, and Pomona's* finding little Corinne on the grand opera stage in Paris, that I can do nothing but write about it to you. I wish you could understand Egyptian, for then I could immortalize the event, or the situation, or the satisfaction I feel, in vertical columns of hieroglyphics, headed by all the tats that mean Give and Tell, and all the Anchs that mean Life and Resurrection. For has not our poor little fondling of a survey died, and, lo! is he, she or it, not alive again? . . .

PHILADELPHIA, *June* 16, 1891. PETER LESLEY TO HIS WIFE.†

. . . The crisis has arrived. Mr. Myers writes me to send on my copy (Final Report) at once, and he will furnish me with five or six forms (= 80 to 96 pages) per week until it is finished.

This is awful. But I must make hay while the sun shines, if I get sunstruck in the fields.

Farewell to my long letters to you and the children. No vacation this summer. Fortunately I succeed in making myself comfortable in our comparatively cool rooms in Clinton Street.

PHILADELPHIA, *June* 19, 1891. TO HIS WIFE.

. . . I am too busy and mentally fatigued to write. . . . I should be glad to get off to Newburg, but my MS. has not yet gone to Harrisburg, and I keep finding important holes to fill, and rents to mend. In fact, the whole thing is badly moth-eaten since I wrote it three years ago; and wasn't good stuff then. Sometimes I take a noble view of my mission; sometimes despair and despond, and tush and pish a good deal; but my fit of swearing has passed over. If everybody I love will let me alone awhile, and not tug at my heart-strings, I shall get along all right. If I could only get you and Margaret and Mary to say that you could all of you get along quite well without me, I should feel contented and happy enough, even under the burden of this Book. But if you all keep calling to me from hundreds of miles away, like the Man of Macedonia to Paul: "Come over the Dardanelles

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* From one of Stockton's stories.

† This letter marks the beginning of the struggle to put through his Final Report rapidly, a struggle too painful for a man of his years, and which ended disastrously two years later.

and help us!" what can I do but sigh, "Oh, who will deliver me from the body of this . . . Book?" . . .

July 9, 1891. To his Wife.

. . . Your encouraging report of what Walcott said to you about the desire of the *geologists* to read what I write; but that is precisely the pinch of the situation. If all geologists would promise me personally not to read my Final Report, I should be in no distress of mind whatever; for I *can* teach the Laity; and I write for the lay brothers. In fact, I ought to be keeping a geological Kindergarten; for that is all I am fit for.

Philadelphia, *July* 12, 1891. Peter Lesley to his daughter Mary.

. . . I hear the church organ—as I sometimes catch the ideas of truth, distant and low and very sweet. How old is music! The shepherd's pipe has grown in five thousand years into the Organ, with as many reeds as an ancient Banyan-tree has dropping branches. How native is music to the earth! But what an earth it was before the age of bees and birds! But even in the coal measure times, there were whirring flight notes of insects; murmurings of reeds rubbing against each other, and of stiff leaves; bursting of nuts; peeping of frogs; and in the age of reptiles, sharp barkings, and blowings, and splashing noises of all kinds, relieving the silences of creation. The pheasants taught men first to drum. Out of the bow-string came the three and then the seven stringed lyre, and then the great harp. How early in the history of the nomadic races must have been invented the willow whistle! and long afterwards the oaten pipe.

Wait long enough, and all things will come to you. Yesterday a flash of truth came over me like that of a search-light. I put two and two together, and suddenly I perceived that they made four. Frazer was quite right. The Phyllites of Peach Bottom *are* indeed in a synclinal, and lie upon the Tocquan gneisses.

One great question settled; settled by an insignificant curved stipple-line on a little illustration map of the Tidewater country of Maryland by Keyes, published in a bulletin of the Geological Society of America. So a dozen coincidences may at any moment produce a Reformation or a Revolution. Who would have supposed that if the Turks took Constantinople the English monasteries would be suppressed, to found Oxford and Cambridge, and two vast republics would grow up under the setting sun? The United States, and France.—Sometimes, the wait is long

enough and wearisome. We are all of us indeed of the family of the Seven Sleepers. Here am I, nearly seventy-two years old, and have not yet with all my searching found the right name for the rock at Fairmount where the woman holds the goose, and the goose spouts water which I used to drink when I was a boy.

Dear Mary, *your* boy will know all about it. He has plenty of time to wait; I have none left. I must go hence, and be at peace; on a Fairmount where the gneisses cease from troubling, and the writer is at rest.

I wish I were sitting under the Walnuts this morning beside you and your dear mother, watching the children play. No doubt I shall be there in a few weeks, when I reach my chapters on the Silurians, which require no reworking except while reading proof. . . .

PHILADELPHIA, *Jan.* 31, 1892. PETER LESLEY TO HIS WIFE (at Atlantic City).

. . . Poor letter-writer I have become. Fossils have poisoned my style. No man can advance six months on the road of publishing a Final Report, without coming to the end of his spiritlyness (sprightliness—but spright is old English for *spiritus;* and I prefer spiritly; it is nearer to spiritual). Why should we be the thralls of a fixed grammar and etymology? Might as well be victims of entomology. Indeed I think this sentiment is the real motive of all slang. People get so tired of being ordered round by the grammarians and etymologists. . . .

PHILADELPHIA, *March* 10, 1892. PETER LESLEY TO HIS SON-IN-LAW CHARLES.

. . . I am now at nine o'clock ready to attack the text of a supplementary description of the Lehigh Paint Ore bed, to fill a gap between my MS. copy page 1544 and 1548. I have printed Volume 1, which will soon be bound, and have read 70 pages of Volume 2, beginning No. V. Clinton. Myers has 300 pages of copy in his hands, and I shall send him 150 more on Saturday, if nothing untoward happen to prevent.

In a word I have safely explored and passed up through the Azoic Hell, the Cambrian Purgatory, and six lower heavens. I am now flying merrily through the Seventh Heaven, called the Oriskany; a crystal heaven, for it furnishes all the glass sand wanted at Pittsburg, and elsewhere. My illustrations are so advanced, that the next to be made are for Chemung No. VIII. g and the Catskill No. IX.

You would be surprised to see, if you were here to watch my work, how completely occupied I am every day from this hour to three o'clock, in *fixing up* my MS. copy, written several years ago; paging; recording; transferring text paragraphs to foot-notes; interlining; adding new foot-notes; correcting miswritten names and dates; transposing; inserting matter written more recently; placing illustrations properly; reading galley proofs, cutting them up into pages, . . . etc., etc., when I feel well, which in fact I do now, after some weeks of poorliness more like old age than usual. I have written no letters to my dear children, because I was quite incompetent for the effort or occasion. Life is so full that a letter once started grows like a willow thicket by a country brook. *Voici.*

So I shall cut this one down and go to work. . . .

July 8, 1892. PETER LESLEY TO HIS WIFE.

But, oh, the darkness of the unknown! Oh, the possibilities! Oh, the loneliness! Oh, the infinite spaces of Space! Where even stars disappear. May not even the angels disappear? Oh, the horrible possibilities of Eternity! Geological science is a nightmare for the loving heart of man. I wish we had been peasants, artisans, anything but this impending thunder-storm of the Science of the 19th Century.

This is the beginning season of the sad years of depression, "loss of Faith," and terror. The climax came a year and a half later, but from now on there are continued suggestions of the coming breakdown.

The latter half of 1892 he wrote long letters to my mother, containing many fine bits, but with much that sounds overwhimsical, over-excited, like a brain rushing along through sleepless hours, and less under control than usual.

MILTON, *Aug.* 22, 1892. SUSAN I. LESLEY TO HER HUSBAND.

. . . I went to church yesterday and heard Dr. Peabody on the Eternal Life—one of his deep strengthening sermons. The old man stoops and shows his age physically—but he is living in the Immortalities, and his intellect is pure and clear. I wish I could tell you about the sermon, but you would feel it all in his text, "I am come to give them Eternal Life." The whole really was, "live the Christ life, and eternity will be revealed to you, every day and hour. . . ."

NEWBURG, *Aug.* 25, 1892. PETER LESLEY TO HIS WIFE.

. . . Many things in your late letters moved me with various emotions. I do not reply to your letters. Pardon me, it tasks my brain; and my brain is like an old camel in a caravan moving under a load across the desert. Ah, listen to the still falling rain. It fills the cisterns. Surely there is rain of divine influences which fills the cisterns of the soul. I can comprehend how a man like Dr. Peabody should live in the Immortalities. It is a distress to me that I cannot, with honor and honesty, shake myself free from the Mortalities, the facts of science, which grow more and more to my view the very dregs and dross of the Universe. How hard it rains! I wish it would thunder and lighten. But it is only the weeping of the ocean on the continent. The Southeast sirocco has been blowing all day, and making life a burden to every mortal; but blessing the vegetable and animal creation. How little regard has the brute nature for the comfort or convenience of Man, who arrogates lordship, when he is in fact the born thrall, *adscriptus glebæ naturæ!* Yet what a princely scion of angelic stock is the soul of Man, after all! Look round on the animal creation, and where can anything commensurate with Man's Soul be found? Surely in the image of God was he created. How we can imagine! how we can reason! how we can invent, construct, create—like God! What tenderness, what force, what wisdom are in our thoughts! What a splendid creature is Man! Look at his eyes—they are seas of light. Look at his fingers; they are poems of adventure. With eyes and fingers man can re-create the Universe. *In petto*—yes—but what is great and what is small? Size is nothing. Newton's orrery is quite as admirable as the solar system. If it be an imitation, so is a son an imitation of his father, and the daughter an imitation of her mother. Size is no criterion of value. The mite is as marvellous as the Mammoth, and as perfect a creature. Who can tell us the secret of creative intelligence? Who by searching can find out God? That has been the wailing cry of Philosophy from ages past to the present day, and will be until the Day of Judgment. . . .

NEWBURG, *Sept.* 9, 1892. TO HIS WIFE.

. . . Our story came to an end to-night, . . . the dear good Barnaby, and Joe and Dolly, Edward Chester and Emma Haredale, the locksmith and his wife, the Maypole restored—everything set right and everybody happy. Surely Dickens in his way is as wonderful a story-teller as Sir Walter in his way. Why did

the English not make him Sir Charles Dickens? They dared not do it. Sir Walter was an aristocrat, and glorified the past, which is worthy of all reverence in Tory eyes; Dickens was of the people, a democrat, denouncing and exposing the past, and prophesying a better future, a dreadfully better future, hated and dreaded by all Tories. What an anachronism would Sir Charles have been! As great an anachronism, and much greater than William Gladstone made Earl of Hawarden. Yet I venture the idea that the G. O. M. would be mightily well pleased to die Earl of Hawarden, K.G. Such is the tyranny of fancy and language over the soberest souls.

I am reading "Peveril of the Peak." Poor Bridgenorth! It is piteous to think how much suffering can be concentrated in a human bosom.

One o'clock. Can anything be more annoying than sleeplessness?

Sept. 16, 1892. To his Wife.

. . . As we have just got Peveril into the Tower, and the kind-hearted Warden has allowed him to keep the handkerchief which his mother dropped out of his father's cell in the big tower, we all three come to bed, and I will neither write to you just now, nor glance at my two great rolls of proof brought me this afternoon by the postman. I see it goes down to the very last page.

No, I do not think I can go to bed quite yet. What strange stuff our brains are made of! We take more interest (you do not; I only speak of inferior creatures like myself) in the adventures of dead or fictitious or fantastical personages than of the living and real persons of our own age and society. And yet there is enough both of comedy and of tragedy around us to rival the Countesses of Derby, Fenellas, and Sir Geoffrey Hudsons of Scott's romances. But, then, the novelist sets us behind the scenes, or upon the stage itself; whereas, in real life we only hear and see the tenth part of the words and deeds even of our most intimate and interesting friends. This is the charm of romance. This is the genius of the Great Magician of the North. He makes us gods; we see all the things, all the actors, all the agents, all their motives, all the beginnings and endings. Nothing is concealed, nothing omitted or forgotten. And how delightfully his philosophical interludes—his antiquarian lore—explain and elucidate and illustrate the course of events, from the fountain-head to the mouth of the river, where it is merged in the boundless ocean of common life! What new

charms history receives from romance! It is of no importance whether the romance is actually true to facts or not; if not, so much the worse for the facts. The facts *ought* to have been as the romancer describes them. That is enough.

Oh, my Susie, truthful as I was born and educated and disciplined by the martinetry of science—you can never know how deadly sick I am of *facts*. They are so coarse and low-bred, so essentially vulgar and commonplace. What would the clouds be to us, were they not capable of taking on the morning and evening glories of color, which last, alas, but too few moments, yet are worth the whole day and the whole night, between which they utter a matin and vesper song of heavenly music!

Have you heard of the new discovery? The great Lick Telescope has found a fifth satellite of Jupiter; only 100 miles in diameter; only 120,000 miles from the planet; and most wonderful of all, rotating around it at the miraculous rate of once in just twelve hours. That is *twice* round the huge planet every day. So that the Astronomer can *see it move* as well as he can see an eagle fly at a great height above his head. . . .

NEWBURG, *Sept.* 19, 1892. TO HIS WIFE.

. . . The day has been a dull one for me, because I have finished work on my second volume and have no heart to begin Volume 3. . . . I did a strange thing. I wrote three letters. What a Herculean labor! I could scarcely frame the letters; my hand has grown so cramped and irregular, I hardly recognize them as my own handwriting. But so neither can I recognize my countenance in the looking-glass, which I therefore seldom look into. It is the wraith of my former self. So passeth the glory of this world. We become scarecrows to ourselves. Yet, oh, thank God, not to each other. The veriest haggard vision of one's self is beautiful to those who love us. I remember how beautiful my old grandmother Allen's face was to me to the end; and how beautiful Aunt Harriet's face was. Surely the fancy of old love is the very heart-blood of God. Old, old, old, is this to be the only refrain of the last song of life? Yet yesterday was Kossuth's ninetieth birthday, celebrated in Turin by processions and fireworks. And Kossuth was no Savoyard—he was a Hungarian. One of that despised race of which our strikes make so free. I well remember standing at Market Street wharf in 1850, and doffing my hat to the hero, and how he turned and touched his hat, and gave me a sweet smile as he went on board the steamboat. Just as I remember in 1867, how I stood at the

pillar of the portico of St. Peter's and touched my hat to Pio Nono as he got into his cabriolet, and the kindly old man returned my salute with the same lovely smile.

Strange conjunctions, my Susan. Strange conjunctions. Human lives collide, like railroad trains.

I have lived with peasants and princes, boors and sages. I have encountered panthers, wolves and bears in the forest, and peers and *savans* in the Salon. What is it but a rout? Death comes and wipes it from the slate. . . .

NEWBURG, *Sept.* 20, 1892. TO HIS WIFE.

. . . I think I had better not write to you any more at bedtime, because our lovely and exciting evenings put me into great spirits, and my first and perhaps second pages are worth sending to you; but then I lose heart as I write, feel lonely and get abominably egotistical, and wind up at midnight with conclusions which do neither myself nor you any good, can give you no pleasure, but pain, and I destroy them, as I did this morning. Of late I have been getting a realizing belief in the look upward and not downward, etc., as a cultivable habit; and Paul's "now, brethren, whatsoever things are just, pure, honest, agreeable, honorable," etc., think of *those* things (and not of things of an opposite character) is a sage advice.

Your long, dear, hearty, wise, self-forgetful, cheerful, hopeful letter of Sunday noon (with Walcott's returned) was read to Henry and me just now as I pushed Malcolm's carriage under the shade of the great elm-tree, out of the front entrance, along the sidewalk under the hedge, in at the other entrance, round in front of the stables and studio, and round the lawn back to the portico. We sympathized with the spirit of every line of it, rejoiced in your feelings of renewed health, and, I at least, drank in spiritual drafts of heart vigor from your words. Yes, the little ones find our old and half-forgotten truths as new and fresh to themselves as we once did. The ocean of truth remains ever sweet and salt—the rains of heaven ever the same sweet and fresh. Thus the eternal world renews itself day by day, and generation after generation. . . .

NEWBURG, *Sept.* 27, 1892. TO HIS WIFE.

. . . I fear that this last volume will never be printed by me to its close; at all events, that if I can sustain the labor it will require eight or nine months instead of the six for which I have pledged myself. But I am resolved to go slowly, with all due

precautions, and let the first and second volumes stand sponsors for my good faith to the public. . . .

Sept. 29, 1892. To his Wife.

. . . Old as I am, in my seventy-fourth year now, I live in a world of romance. I seem to be a disembodied spirit, having no more to do with the material universe than have the planetary spirits, or gnomes and kobolds, the fairies and brownies, gods and goddesses of ancient and modern mythology. But I wear chains, duties, contracts with mortals, to which I am submissively subject. No gentleman can fail of his promise. I have pledged my honor to do a work in which my heart has no concern. I must finish my book. But how different is my interest in it now from that which I once felt in every piece of scientific work which came under my hand! Absolutely task-work is it. Nothing but honor could compel me to its conclusion. I do not hate it, for it is good and worthy. But I love it not. *C'est passé, cet ouvrage.* It is a morning-glory blossom that has curled its petals inward. For six more months I obey the spell —then I shall be liberated. . . .

Philadelphia, *Nov.* 7, 1892. Peter Lesley to his son-in-law Charles.

. . . What a day will dawn to-morrow! 65,000,000 human beings voting or sending their husbands and fathers to vote who shall rule them. It is an amazing modern drama, of which the wisest ancients never dreamed. Had Plato thought such a dream, what a Republic he would have written!

I suppose that you know no more than I do what is to happen to-morrow. Perhaps you think as I do that *practically* whatever happens will have very little effect on the state of our country. We are an eminently conservative people. History is a bridge of delicate structure over which common-sense people walk with due precaution. Americans have common sense if they have nothing else. I believe in the people, and in their great knowledge, and in their good nature. I despise college professors and cranks who never did a day's hard work in any trade or invested capital in any business.

Nov. 9, 1892. Peter Lesley to the Same.

Your little Mother's letter from Brooklyn just received has a ludicrously heart-broken tone. It fairly weeps in ink—pale ink. Fancy! Her brother and her nephew congratulated her,

and each other on Grover Cleveland's Victory. She was speechless with grief and could not eat her breakfast. Dear soul, how hard she takes things!

PHILADELPHIA, *Nov.* 9, 1892. PETER LESLEY TO HIS WIFE.

Don't break your heart . . . that Cleveland has been elected president. He repudiated his party's platform, and will prove to be a *Conservative*, like the bulk of this extraordinary American Populace. He will not overturn the wagon, and spill us all out.

Dec. 19, 1892. SUSAN I. LESLEY TO HER DAUGHTER MARY.

Father had a very bad week the last, but has come out of it, and to-day seems quite like himself. I went upstairs to carry him his Malt, after some hours at his drawing table, and found him all smiles, over a beautiful illustration he had just finished, and he exclaimed, "Look here, Susie, this will make every Geologist's hair curl with pleasure when he sees it."

PHILADELPHIA, *Jan.* 20, 1893. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Last evening I went to the Unitarian Club, where was a memorial evening to Whittier, as perfect an occasion as I ever knew. Mr. Salter, of the Ethical Society, was the principal Orator of the evening, and his account of Whittier and delineation of his character and genius, was as fine as anything I ever listened to. I shall remember it always, just as I remember the few times I ever heard Charles Sumner or Wendell Phillips. Then dear Mary Grew followed with the loveliest reminiscences of him—and though her voice was feeble, the tones of it were most moving and musical, and pervasive. She seemed to speak out of heaven, as though she was already communing with his ascended spirit. I never heard her speak like that before—out of a great peace, a heavenly vision, a divine compassion for all humanity, such as she said Whittier lived in. She closed with reciting beautifully, a poem of his that he gave her, which was never published, but a divine poem. I came home feeling better for having gone. I try to keep my soul above anxieties, by taking whatever outside good thing I can. . . .

PHILADELPHIA, *Jan.* 30, 1893. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . Yesterday, I went to Holy Trinity to the beautiful Memorial Service to Phillips Brooks. Dr. McVickar was most mov-

ing and impressive in his testimony to the wonderful man. Their intimacy was like that of David and Jonathan. Dr. Brooks always called Dr. McVickar his "big brother," and though the the latter had not his genius, he had perfectly his spirit and character, and it was like hearing a twin brother speak of his life and influence, the words were burning with the heart's eloquence. I doubt if any man has been so loved and mourned since Abraham Lincoln. Dr. McVickar told lovely stories about the expressions of cabmen and postmen and very humble people in Boston, who flocked for a last look at him. One cabman who was in violent grief was asked, "Was he *your* Bishop?"—"No!" said the man, "he was *everybody's* Bishop." One poor old Irish woman knelt by the coffin, and silently and tearfully took from under her old shawl three magnificent white roses, and laid them on the coffin. The young Harvard men who bore the coffin would not touch the roses, to move them from where she placed them, for they reverenced her grief and her movement. The most beautiful things are being said of him by people of all sects, for his soul transcended all limits of sect. . . .

About this time my father received the following letter from Sir Archibald Geikie, head of the British Survey, which gave him great pleasure and comfort, in a time of frequent depression:—

28 JERMYN ST., LONDON, N.W.,
30*th Jany.* 1893.

MY DEAR FRIEND,—Your long letter of the 9th instant, though it was an answer to one from me, must not be left by me without early acknowledgment. I want to tell you how heartily I sympathize with you in the dejection of spirit which prompted you to write to me as you did. There are times when one feels utterly down-hearted about one's work, and doubtful whether after all it was worth doing. A word from outside at such times by way of sympathy and encouragement is often helpful, and it would greatly please me, if such a word from me could cheer you.

Surely you cannot be in any real and permanent doubt of the value and interest of the great Survey which you have brought to so successful a conclusion. It is in my opinion a monument of patient skill, thoughtfully organized, sympathetically carried on, and admirably co-ordinated, through all its branches and all its progress. I think it will be of the utmost value industri-

ally to the State of Pennsylvania, for you have supplied an accurate geological ground work for all mining operations. Your Reports bristle with geological observations of general significance, and they must aid in furthering the progress of geology in the State. Of course the voluminous nature of these Reports is an obstacle to their being widely read by the general body of Geologists outside of the United States. But you are removing this obstacle by your Summary volumes. The introductory part of Volume I. is capital reading and will, I am sure, carry many a reader onward, to explore the rest and the more technical parts of the book. The vigorous writing especially delights me, for geologists, as a rule, never cultivate literature, but express themselves in the most slovenly way. . . .

In your letter you speak very touchingly of your own thoughts and feelings. Yes! science *is* dry sometimes. One longs for something more humanizing, something with heart and soul and hope in it. You find consolation and employment in literature, and there too I get much refreshment. Like you I place Scott among my chief treasures. I read him aloud to my children, who are all brought up to regard him as their lifelong friend. I often take up the old poets and go steadily through them. There is something to my mind infinitely more restful in the poetry of our past than in that of the present day, when every singer tries to paint the moods and feelings of his own rather morbid nature, and often ends by being quite unintelligible.

I sincerely hope that the illness from which you have been suffering these last months has by this time passed away, and that with renewed health you have regained your old cheerful temperament. I treasure as one of the pleasant memories of my visit to Philadelphia in 1879, the picture of your home in Clinton Street, with yourself in the midst of your work and your charming family circle.

Pardon this rambling epistle, but I could not let your letter pass without sending you a few lines of sympathy and affection.

Believe me to remain,

Ever truly yours,

ARCHIBALD GEIKIE.

CHAPTER XXXVII

Last Years in Philadelphia and Final Retirement to Milton. 1893–1900

From 1893 all the letters are from my mother's hand. Life to her was still full of activity and interest. She still carried on her heart the heavy anxiety of my father's broken condition, but the worst years were over. Realizing that he could never again return to work, she wisely resolved, more for his sake than her own, to keep up her own life of activity, and bring to him as much of it as he could enjoy. The same sympathy subsisted between them, and the same unity of interest, and he rejoiced in all that pleased her. It was the hardship of these years that she could no longer share her sorrows with him as of old, for all his emotional nature had become even more sensitive than in his earlier days.

They both suffered much and often, as all who live to an advanced age must, in the death of old friends "falling like leaves around us." My father's brothers and sister all died before himself, and the deaths of her sister Catharine and her brother Edward left my mother also the last of her family. The relations with all of these had been of strong and constant affection, and the grief of bereavement was proportionately strong. From her brother Edward's death she suffered deeply to the end of her life. He had been the one person, outside of her immediate household, on whom she most depended, and from his early youth he had watched over her comfort with a wise and constant care. Nevertheless, the little Milton home was a place of good cheer and hopefulness. Children and grandchildren were there much of the time, and the friends who lived in and about Boston were constant in thoughtful attentions. During the last two years their daughter Margaret with her

children lived with them, which was the great happiness of their failing days. And a faithful friend and attendant, Miss Margaret Edgerton, took all care of the details of living from their thoughts.

It was beautiful to see in the last years of my father's life, when my mother's failing strength had made her the greater invalid of the two, how his voice and hand would soothe and comfort her in hours of trouble, as none other could.

PHILADELPHIA, *March* 9, 1893. SUSAN I. LESLEY TO HER DAUGHTER MARY.

[After telling of various troubles and anxieties in regard to her public work, she adds:] Last evening, wishing to be lifted out of the wearing atmosphere, I reached down my little old early edition of Emerson, and read aloud to Father his address before the Divinity School. How noble it is! How uplifting! I went to bed in a glow of gratitude, and so did Father, for the great thoughts of this great, good man—and thankfulness too, that we had known and loved him.

I send you a copy of Mrs. Hill's last letter to me. People say no good letters are written now, I can't agree with them. I think there were never better letters written than to-day—far better than a hundred years ago. . . .

My mother's deep interest in what came to her friends of good and evil fortune is well illustrated by part of a letter of this date. After hearing of the engagement of two young friends, she writes:—

I think that there is no relief from anxiety or sorrow, to compare with such a piece of news as this beautiful engagement of K. I have never had so long a period of deep anxiety for many years, as this winter's now past. But when I got K.'s letter, it seemed to sweep away all the clouds, and my heart wanted to indite a new song. I felt all day as if it were a festival.

Do you know that on Friday, April 7th is my birthday, and that I reach my threescore and ten years? What a happy life I have had, how blest in every way! Yesterday Lizzie May came down to tell me that she begged the favor of inviting all my friends to meet me at her house from four to six, to celebrate my seventy

years, in the most simple and informal way. At first I declined, I felt I had not seen any one hardly, all winter, and a timidity came over me. . . . But when I thought of the kindness which prompted her, and saw how disappointed she looked, I resolved to go. . . . It was indeed kind of Lizzie to plan such a surprise. . . .

NEWBURG, *Sept.* 5, 1893. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . As I lay awake last night . . . the thought came to me that you are preparing your paper for the Charity Organization, and I wondered if I might help you with any suggestions.

First, the great objection always made to the organization at the outset, is that Charity organized is a purely mechanical contrivance, which is detrimental to true charity which is a divine sentiment, etc. But I heard Seth Low, the former Mayor of Brooklyn, when he came to speak for us at a public meeting in Philadelphia, set that whole matter lucidly. He compared the *organization* in its relation to the *sentiment*, to the Post Office organization in its relation to letter-writers. It furnishes the ways and means and resources for rapid and sure transmission; it has nothing whatever to do with the sealed up sentiments or influences, inside the letters. Each individual makes of those whatever his capacity or talent or choice puts into them. So in Charity, we ought to be thankful for Offices that investigate cases and supply information, and furnish resources, thus giving an opportunity for private benevolence to act. . . .

PHILADELPHIA, *March* 15, 1894. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I decided to go to the Contemporary Club in the evening. Booker Washington was to speak about Tuskegee, and there was to be a debate afterwards. . . . It was a most interesting evening. Mr. Washington was very eloquent, and told the story of his twelve years of service in the Black Belt, very simply but with enthusiasm. Then followed a Mr. Durham, who had some black blood, but is a Society gentleman of education and influence; and then Dr. McConnell got up, and made a most disappointing speech and a most discouraging one, to the effect that the race antipathies were so strong they could never be overcome, etc., etc. Whereupon, Mr. Talcott Williams got up, and restored the good feeling of the audience by relating some historical facts to show how races of quite opposite tendencies had been fused in

times past, etc., etc. And he was followed by Mr. Frissell, the former assistant and now successor of General Armstrong at Hampton, who had all the results of twenty years of training and dealing with the colored race. And the debate was closed by dear Dr. Wayland, who made everybody laugh throughout the assembly, and sent them away in the best of humor. Dr. McConnell had closed every sentence of discouragement with these words, "It's a *grea-ate* problem." Dr. Wayland said that everybody who was dealing with a question *theoretically*, always said, "It's a great problem."—The moment they began to work at it *practically*, they partially solved the problem straight along, just as Mr. Frissell and Booker Washington had done. And then he told the story of the Good Samaritan in the funniest way you can conceive of. People shook and roared at the account of the two reverend clergymen who stopped alternately, and looked at the poor wounded man, and one of them said he couldn't stop to see to him, he was on his way from Jerusalem to Jericho, and had to be at a meeting where he was expected to preside, and he said, "It's a problem"; the other one had some equally good reason, and he said, "It's a problem." But after a while there came along a poor man on a very humble and objectionable beast (he would not name him), and he got down and got his shoulder under the wounded man, and lifted him up and got him home, and he solved the problem. But the details were far funnier than my account of it. Dr. McConnell sat in front of Lucy and me, and he literally laughed till he was shaken to pieces.

COHASSET, *Aug.* 7, 1894. SUSAN I. LESLEY TO HER HUSBAND.

[Speaking of a call on some young friends in Milton, she writes:] H. alluded to the war, some association bringing it up, and he said it seemed hard when there were so many good men on the Southern side, the North should have all the glory, and the South none, etc. He spoke gently and sadly, and I, full of sympathy, could but adopt the same tone. But I told him, had he lived in this country twenty years before the war, his feeling would be very different. I described the concessions made by the North, one by one, the promises broken by the South, the steady advance of slavery into the free Territories, etc. When I alluded to the Missouri Compromise, they both asked eagerly, "What was that?" And I told them. They knew so little that I felt as I used to at a Ward Meeting, when called on to explain things, and I warmed to my subject, and went on and on, to show them how inevitable the war was, and how impossible it

was to give any glory to those who were defeated in opposing the cause of everything just and holy, however we might admire individual generals and feel for them too. Then they asked, Had I any personal experience of the wrongs of slavery? And I told them the tragic history of Mary Walker from beginning to end, and realized it all over again. I talked thus for an hour, always quietly, but with earnestness, and they listened with the utmost interest. . . .

PHILADELPHIA, *Nov.* 13, 1894. SUSAN I. LESLEY TO HER HUSBAND.

. . . I find it good to sit down by the fire in the quiet parlor and write to you, and feel rested in doing so. How many days' histories I have to give you! Last Thursday I went into Boston by a five P.M. train to spend the night at the Ames's, by special and urgent invitation. They were to have in their parlors at eight o'clock a meeting of the Round Table, a club composed of men and women who meet every fortnight to discuss the current topics of the day. And Mrs. Lincoln (Alice Towne) was to read a paper on her investigations into the Institutions of Boston, and to state the differences between them and those in foreign countries, where she has been studying eight of the largest during the past summer, especially those in Berlin and Birmingham. She contrasted the thoroughness and care exercised in these countries in the rigid rules, by which no young criminal in vice was allowed to be in the same building with hardened offenders,—much to the disadvantage of Boston.—She showed up the misery of letting politics influence the choice of Officials, and also their ignorance and incompetency, as well as neglect and cruelty. It was a very strong and forcible, as well as a very fair paper. There were no over-statements or exaggerations, and it was as full of wise suggestion and kindly judgment, as it was of true sympathy and warm feeling. It was listened to with profound attention and respect, and when she sat down, one after another of the fine gentlemen rose to express their appreciation of her work in Boston, and to offer her their sure co-operation, or else to ask her some question of details, which she answered with the greatest beauty and fluency. I felt very proud of her, and how I wished her father could have heard her. There was very excellent speaking from Dean Hodge, an Episcopal bishop from Chicago, from Rev. Dr. Allen and Brother Charles [Ames] and Mr. Curtis Guild. . . .

LITTLE BROOK, *Nov.* 28, 1894. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . I believe it is an age since I wrote to you. I can't remember when it was. This life near the close of the 19th Century is not what it was in the first three or four decades. There is so much happening all the time, we change our homes so often, we travel or receive travellers, what was once a rare event, occurs frequently. We are under pressure on every side, and the multiplication of all the facilities for action keep us always trying to compass what it was formerly impossible even to attempt. Ah! if through it all we can only keep a quiet mind, we need not regret it. My last month in Milton was as you know very full. . . .

PHILADELPHIA, *March* 28, 1895. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . You don't know what lovely accounts I got, of the little Festival at our Day Nursery last Saturday night. There were two Jewish Rabbis there who spoke in Russian and German to their own people, and our own English Mr. Phillips, who translated those speeches for the colored people. There was beautiful music on piano and violin, and several songs, and then a supper of sandwiches which I made, and soft gingerbread, and hot chocolate. There were sixty present, fathers and mothers of the children in the Day Nursery and Kindergarten, and a few neighbors in the street. But none of the College Settlement ladies came, which I was sorry for and wished M—— had come. Mrs. Seidensticker came last evening and told me all about it. She said the speaking of the Jewish Rabbis was very fine. They told these poor people what American Citizenship meant, and how when they came here it was their duty to throw off their Old World ways, and try to live with all the cleanliness and decency and thrift of Americans. He explained to them all the benefits the city gave them in paving their little courts and alleys with asphalt, and begged them not to throw their refuse and garbage into the clean streets. They also gave very beautiful and inspiring spiritual exhortations, and to the whole their hearers gave cordial applause. Mrs. Seidensticker said she never saw a more orderly company. The refreshment table was in the little room, and there Mrs. S. stayed, sending in relays to the people by the matron and her daughter and Miss Somerville and her assistant, who had little trays and helped every one. She said there was not a rude thing done, and some of the poor mothers who go

out to day's work, went up to the matron and thanked her with tears in their eyes, for her care of their children. . . .

PHILADELPHIA, *April* 29, 1895. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . [To-day] I went to a meeting of the Social Purity Alliance, in one of the parlors of the New Century Club. It was a really delightful reunion, for though an old member, I had not been with them for a year. Dr. McVickar presided as usual, and is so cordial and warm-hearted it is sunshine just to see and hear him. I sat next Miss Mary Grew, who is a wonder for her age, so bright and clear-headed. . . .

PHILADELPHIA, *May* 1, 1895. SUSAN I. LESLEY TO HER HUSBAND.

. . . To-day is May 1st, which always recalls to me, how as little girls, Carrie Briggs and I used, the afternoon before, to gather wild flowers, Mayflowers and Anemones, and with other village children who had done the same thing, meet in the early morning between five and six, while all our elders were sleeping, and go through the town, tying the little bunches to the door-knockers of our friends. For the evening before, our elder sisters had secretly made up the little bouquets, and attached cards with appropriate little verses. It was all a great secret and supposed to be a visitation of fairies, and an absolute surprise. Such were the sweet customs of Northampton, seventy years ago, and for more than thirty years before that time, I am told. . . .

PHILADELPHIA, *May* 2, 1895. SUSAN I. LESLEY TO HER DAUGHTER MARGARET.

. . . Yesterday was Inauguration Day at the New Century Club, and as I was the only life member, I was earnestly requested to be present, at three o'clock in the afternoon. It was to be a tribute to the nine Presidents who had served during the twenty years, and the instalment of Mrs. Hall as the new President, Mrs. Longstreth having resigned after three years of faithful and most efficient service. I can assure you those nine ex-Presidents made a splendid show on the platform. But I anticipate. The absent ones, Mrs. Ames and May Lewis Gannett, had both come on to be present. . . .

. . . Mrs. Hall, our new President, is a very noble woman.

. . . We three women arrived at the New Century at three o'clock, they went to the platform, and I sat in the second row

fronting the party on the platform. Mrs. Longstreth made a very noble departing speech, and introduced her successor. Then followed Mrs. Sally Hallowell, our first President, in a speech so brilliant and witty and wise, that I can do no justice to it. Next Mrs. Taylor of Germantown, May Gannett, who was brimming over with delightful reminiscences, Mrs. Mumford, fine as she always is, and Mrs. Ames who charmed every one and was heartily applauded. Dear Mrs. Turner sat so still, and looked more ill than I ever saw her. She could not read her Address, and a friend read it for her. But every one did her honor, and she was spoken of in all the speeches as "mother of the club," as she really was. I heard all the Ex-Presidents, and then at 4.30 I slipped away, sorry to leave just as Mary Grew was beginning to thank the Ex-Presidents, in the name of the Club. There was to be a grand reception at five, and afternoon tea, but I thought it more prudent to leave.

One little incident moved me much, for I have been so rarely to the Club in many years, and have done nothing to help them in any way. But right in the middle of her Address, Mrs. Hallowell spoke thus. "Those were the days of our poverty (twenty years ago), but dear Mrs. Lesley (bless her heart) came forward and had herself made a life member, that she might put us in funds to organize. And then she would talk to us of Octavia Hill and instruct us in her methods, and inspire us with her spirit." When she said, "dear Mrs. Lesley, bless her heart," I felt there was a little movement of sympathy around me. And when I remembered how in those early days, Mrs. Hallowell and I were always at variance, I could not but feel what a large-hearted, generous woman she must be, to have completely forgotten all that. Well! the Club has been a grand success, and we builded better than we knew. Other Clubs have arisen since, among the rich and fashionable, but they have no such showing as ours. . . .

MILTON, *June* 20, 1895. SUSAN I. LESLEY TO HER HUSBAND.

. . . They told me most interesting things about his [Charles G. Ames] preaching on the Common. Walking there Sunday afternoons, he found large audiences in different places, listening to single Tax speakers—crude Socialistic dreamers, and every kind of rubbish. He immediately conceived the idea of taking another corner of the Common, and having a five o'clock meeting of a spiritual, quiet Christian gathering, and so he went to Edward Hale and Mr. De Normandie and others, and organ-

ized a body of the best men to help him, and he began the meetings, a month ago. He had no idea of the throngs that would gather. Fanny said the people came by thousands,* and the roughs were often melted to tears by his appeals. They said they never heard anything like the singing. Little slips of paper with printed hymns and music were handed to all, and everybody sang with a will, after being started by three wind instruments. Fanny said that the Salvation Army who have a stand not far from them have very grand congregational singing, but that it is no finer than theirs, and as their meeting does not begin till the Salvation Army closes, they do not interfere. Is it not a grand spectacle? Depend on it, religion is not dying out at the end of the Nineteenth Century, when such crowds can be gathered to listen to the best. . . .

PHILADELPHIA, *Jan.* 11, 1896. SUSAN I. LESLEY TO HER DAUGHTER MARY.

. . . A little under-current of natural sadness when I think of Father and my dear sister comes over me, but it does not shake my peace of mind. How great are the causes for thankfulness and what a long life of blessed happiness I have had! Last Monday the New Century Club Board gave a lunch to Mrs. Turner on her seventieth birthday, and five Club Members not on the Board, were urged to join, and I was one of those. It was a lovely assemblage of twenty-one fine women, and warm friends. The lunch was excellent and beautifully served, and the Toasts at the end were splendid. Mrs. Sally Hallowell outdid herself in describing Mrs. Turner's *virtues*. Mrs. Mumford descanted on her *vices*, she was a disturber of the peace, she was a *beggar*, etc., all as funny as it could be. Louise Stockton was as bright as anything you ever heard, and Aunt Mary Grew was so solemn and sweet in her Dream about her friend, that no one will ever forget it. Mrs. Turner answered most charmingly, disclaiming all the virtues and all the vices. It was a lovely occasion. . . .

PHILADELPHIA, *May* 13, 1896. SUSAN I. LESLEY TO HER HUSBAND.

[Mentioning the hundredth anniversary of the First Unitarian Church in Philadelphia, she says:] . . . For an unusual

* My mother sometimes in enthusiastic narrative confounded hundreds and thousands as about of the same value.

occurrence has taken possession of my mind and time, and is giving me a wonderful uplift. Mr. May sent me Guest tickets for the Anniversary meetings which began last evening, and close this evening. I enclose a programme which will tell you the occasion.

We started at 7.15, and were at the Church just before the doors opened. . . .

I wish I could give you an idea of the speakers and their words. It was one of the most impressive occasions I was ever at. Mr. May's compendium of the history of the church from its formation was masterly, and delivered with power, and Carroll Everett's after address noble, beyond telling. . . .

When Dr. Everett described the preparation of the Eighteenth Century for the Liberty of the Nineteenth, and showed us that we were not yet fit for the enjoyment of our freedom, because we had in many ways only changed the tyranny of kings for the tyranny of organizations, I would have given much to have you hear it. He showed how this genius for Organization has been the reaction from a too intense and exclusive Individualism, but that it had its grand side, and its dangers. His whole outlook was comforting and inspiring, full of hope, and yet a hope on sure foundations and growing out of his profound study of History. Oh ! it is folly to try and tell you about it. I hope it will all be printed. After church, to save ourselves from long journeys to meet on business, Mrs. Seidensticker, Dr. Hatchette and I got together in a quiet corner, to discuss our affairs in St. Mary Street. It is hard to have to come down from such splendid thinking, to the perplexing facts of the Slums, but it was our duty, and we did it. But as soon as I got home, I went back to my Mount of Vision on which I had lived all the evening, and only left it by falling into a profound sleep.

NORTHAMPTON, *April* 3, 1897. SUSAN I. LESLEY TO HER HUSBAND.

[While on a visit to her nieces.] . . . It was a perfect day, and the air was invigorating. After dinner I had a long nap, and then sat down with Hannah and Fanny to receive twelve friends at afternoon tea, whom they had asked to come and see me. Of my early comrades, were Mrs. Hunt Butler, Miss Julia Clarke, Sarah Todd, and Mrs. Erastus Hopkins, one of the daughters of President Allen of Bowdoin College and sister of Mrs. Henry B. Smith, whom you will remember. The other guests were younger ladies, connected with the College. It was a very rare

circle of fine women and I could not help reflecting what an ideal society has always held sway in this lovely old town. . . .

It seemed as if no sooner than my parents' generation disappeared and there was a letting down of the old standard, then Smith College was inaugurated and a finer leaven still of the Professors and their families came in to rescue society from degeneration. All the best old traditions are preserved, the simple, economical, friendly living, and the high tone of intellectual pleasures advanced as never before. I am thankful to have had these few days here. . . .

MILTON, *Jan.* 8, 1898. MOTHER TO HER DAUGHTER MARY.

. . . Sometimes I am anxious without reason, which I suppose is the effect of years, but I try to hope and have faith at all times. My visits did me a world of good. But when Father says I have a world of courage and sunshine, and that he lives upon it, I feel what a sham I really am, for it seems to me that all my courage has oozed out, and that all I have done, or can do is to

"Bid Patience light her lamp,
When sinks the sun of Hope."

And, oh! how beautiful the world is, and this little piece of it, where the lines have fallen to us in pleasant places.

MILTON, *Oct.* 19, 1900. MOTHER TO HER DAUGHTER MARY.

. . . I have just been reading Dr. Channing's sermons on Immortality and the Future Life—both fine, but not quite all I thought them. But, oh! the nearer we come to the love of the Heavenly Father, the more we get away from details, and rejoice in absolute Trust. Let us do as Emerson taught us, to become absorbed in Trust, and say as he did, "Beautiful and Blessed and blessing is it, even if it should seem to slay me." . . .

Postscript. 1900–1903

There is little further to tell of this life story. There were yet three years of the quiet, peaceful Milton life before the end came to my father one June morning in 1903. These years were anxious, yet tranquil. The power to work was entirely past for both, but not the enjoyment of nature and of friendship. Books were still a daily food, and hours of the happiest social intercourse were of constant occurrence in the little parlor or on the shaded porch. Hither came relations and friends at all seasons, and the young life of the grandchildren made the house a cheerful and hopeful place.

Finally, in the midst of a bright morning, when he had seemed unusually full of life and enjoyment, death came to my father with blessed swiftness. Only a few hours of unconsciousness, and then silence and peace.

From this hour my mother failed visibly. Her strong will had kept her alive for his sake, and now that he no longer needed her she had no stimulus to live. The days passed for her in a gentle haze. She showed the same love to those around her, but her attention often wandered, and there were many hours of bewilderment.

A few months before the end, occurred a slight incident, very touching in its evidence of the survival of an inborn trait. Two of her children were going to the National Unitarian Conference at Atlantic City. They told her that they would see many of her old friends there, who would certainly ask after her. "Oh, yes," she said with her old affectionate interest, "and it will be very crowded and uncomfortable for them there. Tell them to come right here. We always have room for friends!" Time and distance meant nothing to her any longer, but the old instinct of hospitality was as active as ever.

In January, 1904, death came to her also. Only a few

hours before the end, when they thought her quite past moving, she suddenly rose from her couch, walked to her window, and gazed for some minutes over the frozen fields to the hill-top on which stood her churches. She said nothing, only took this long last look. Then she returned to her bed, and never left it again.

It is a wonderful thing to look from the opening years of any life to that moment when the eyes close for the last time, and the soul passes on out of our sight into unknown experiences. It is a deeper wonder to trace the same personal traits persisting, through many succeeding decades, from the childish attempts at expression and the upward strivings of youth, the accomplished powers of middle life, the patient acceptation of the limitations of age, on to the final hour, "The last of life, for which the first was made." Where the stock is good and the vitality unexhausted by previous generations, the long view is an inspiration. When there is a touch of genius and a spiritual tendency in the blood, there is nothing so stimulating to our faith as such a retrospect. Such has been my happy fortune for these last five years in reviewing the period of my father's and mother's lives. If I have been able, chiefly through their own words, to give to those who read these volumes any adequate impression of their strong and beautiful personalities, I shall have accomplished my desire.

My servant Death, with solving rite,
Pours finite into infinite.

What is excellent,
As God lives, is permanent;
Hearts are dust, hearts' loves remain,
Hearts' love will meet thee again.

House and tenant go to ground,
Lost in God, in Godhead found.

Emerson, "Threnody."

APPENDICES

APPENDIX A

BIOGRAPHICAL LETTER FROM PETER LESLEY TO PROF. O. N. ROOD.

NICE, Feb. 8, 1882.

My dear Sir: My daughter has sent me a blank which I am quite at a loss how to fill up. I shall therefore give you some data, which you may use, and you can have lacuna filled up after my return to Philadelphia early in April. I am not well, and find it difficult to write just now. I am spending a few days with Désor, having run down from Paris where cold fogs prevail. But the cold here is quite as severe, I think; and the excessive brilliancy of the sun makes the chill of the shade and of the night all the worse. You need not think of me as an invalid, but there are times in every year when the best constitution will get out of order and make its owner uncomfortable, and sometimes *very* uncomfortable, and even cross and impatient.

1. I was baptized Peter Lesley, as was my Father and grandfather and great-grandfather (the last two in Fifeshire, Scotland). It was a family name for the oldest son. Scotch Presbyterians follow the Peter, James and John rule in naming their boys; at all events where parents and children belong to the peasantry.

My grandfather was a cabinet maker; emigrated to Boston when young; sent his chest of tools round by sea, and went himself on foot to Philadelphia; hired, and lived all the rest of his life in a wooden house built on the north line of the city by Wm. Penn for his gardener, which house and lot he afterwards purchased and added to; married twice; lost his first family of children; and by his second wife, a Pennsylvania German woman, had five boys, Peter, James, John, Joseph and Robert.

John died young; Joseph and Robert lived long, but never married.

James left college to be the Cashier of the Branch Bank of Pennsylvania for 25 years; then of the Bank at Chambersburg; then was appointed by Pres. Lincoln Consul at Lyons. His

two sons Edward and James were men of culture and died leaving young families. James was Asst. Secy. of War to Cameron, and died as Vice Consul here at Nice in 1864.

My father was a cabinet-maker like his father (who was struck with paralysis just as my father was about to enter college) and married Elizabeth Oswald Allen, the daughter of John W. Allen, a printer, born in Charlestown (Boston), whose parents' house was burnt by the British in 1775.

My father had by my mother one daughter and seven sons, two of whom died in infancy; seven years after my mother's death in 1832 he married again and had one son not now living. . . .

These details I write to you as a friend, merely to satisfy your curiosity and that of other scientific friends, especially now that life seems to me precarious and perhaps short. But the public have little or nothing to do with them. In fact I have no "family relations of interest to Science," unless it be that I owe all that I am, and have been able to do, to the early training which I received from a very wise father and to the artistic nature of my mother. We were all taught perspective drawing, machine drawing, and geographical plotting, in early childhood, between the plates on the breakfast, dinner and supper table; statistics, by reference to the volumes of an encyclopædia kept at hand, archæology, from a fine copy of Calmet, mechanics from a copy of the "Circle of the Arts," and language by constant dialectic discussions of the proper meanings of words and exact force of sentences. We were drilled daily in describing events so that they could be understood, and in drawing every kind of object in its true proportions, long before we went to a grammar school. And in our father's workshop we were allowed to become expert in the use of tools, and to try our hand at inventions. I remember making a small steam-engine which puffed across the kitchen floor. In the summer vacations we all had our competitive windmills and watermills. My father was one of the earliest shareholders in the Louisville and Lehigh Canals Companies; was never weary of instructing us boys in the Internal Improvement of the United States; and encouraged our closest inquiries into the anthracite coal trade and all that concerned mining and transportation. At the same time he was a lover of the English classics, read aloud to us modern and ancient histories, and was thoroughly versed in theological controversies. Neither our reasoning faculties nor our imaginations were allowed to repose, and no mischievous or silly literature entered the house; but we were given the largest liberty in

athletic games; and in frequent long walks he kept our attention awake to the works of nature as much as to the works of art. We were sent to the best schools, and were not only taught Latin and Greek, but had private teachers in French and German; but certainly, the instruction which we received from our father was worth more, in a strictly scientific sense, than what we received from all other sources put together; for it laid a deep and broad foundation for original investigation, not merely in one, but in various branches of human knowledge; and started us on our careers, equipped for both seeing, thinking and describing, what we felt to be useful and beautiful, as what we believed to be true.

My brother Allen became a superior physician and surgeon, and was one of the earliest to apply the microscope to pathology.

My brother Joseph became an admirable geologist, one of the best field workers in structural geology I ever met with, and perfectly artistic in his office work. His reports and maps of private and mining properties are models of concise accuracy and beautiful delineation. His principal work is the hypsometrical and geological contour survey of the West edge of the East Kentucky Coal field from the Ohio River to the Tennessee State Line. The portfolio of sheet plottings of this survey was demanded by the government during the war; was sent to Genl. Buell's headquarters; and has disappeared. The reduction on a single sheet and the profile section was never published. But cross sections were engrossed in Vol. IV. of the Geology of Kentucky; and a smaller reduction was published in the Trans. Amer. Phil. Soc.

My wife was Susan Inches Lyman, daughter of Judge Joseph Lyman of Northampton, Mass. One of her nephews, Benjamin Smith Lyman, became my pupil in field geology, and worked with me a number of years in Pennsylvania and in Nova Scotia. He was then appointed by the British Government to make the petroleum surveys of India; and subsequently by the Japanese government to survey the northern Island, and then the petroleum fields of the main island. He has recently returned to Northampton, and is still occupied with the final office work of that survey, much of which was published at Yeddo. . . .

2. After having graduated in the University of Pennsylvania in 1838, I was appointed, by Prof. Henry D. Rogers, sub-assistant on the First Geological Survey of Pennsylvania, for the first three months under James D. Whelpley, afterwards as the colleague of James T. Hodge, and afterwards alone. The winters

I spent in Philadelphia. My field work was done in 1839, 1840 and 1841. (The closing year of that survey.)

The winters of 1841–2, 42–3, 43–4, I passed at the Theological Seminary in Princeton, N.J. During the first year I was also engaged in constructing the State Geological map and sections.

From May, 1844, to May, 1845, I was making a foot journey through western Europe, and studying at Halle in Germany. The next two years I spent as a religious missionary in the forest counties of Pennsylvania; the winter of 1847 with Prof. H. D. Rogers in Boston preparing the reports and illustrations of the Geological Survey for publication; and the next three years, as a settled clergyman in Milton near Boston.

In the summer of 1850 I was employed by Prof. Rogers to make a topographical survey of the Shamokin Coal Field; and the season of 1851 with P. W. Shaefer, Lesquereux, Désor and others, in mapping the western part of the Pottsville basin.

The following years I was employed by the Pennsylvania Railway Company in mapping the bituminous coal fields of Indiana and Westmoreland Counties, and by other companies and private persons in surveying geological localities in various states and in the British provinces, chiefly for iron ores and coal, and afterward for petroleum.

I became the Secretary of the American Iron Association in 1855 and published the "Iron Manufacturers' Guide" in 1858;—Secretary and Librarian of the American Philosophical Society in 1859;—Editor of the *Railroad and Mining Register* in 1868–9.

In 1863 I was sent by officers of the Penn. R.R. Co. to report on the Carbonization of Rail heads in England, and the Bessemer works of the Continent.

In 1872 I was appointed to the Chair of Geology in the School of Mines of the University of Penn. and in 1874 State Geologist of Pennsylvania.

My home has always been in Philadelphia.

In 1867 one of the ten commissioners appointed by the Senate of the U.S. to the Paris Exposition.

3. Born, Sept 7, 1819, at Philadelphia.

When I came of age, I adopted the business signature of J. P. Lesley, to distinguish it from that of my father who signed himself, as I did before then, Peter Lesley, Jr.

4. I have done nothing worthy of record in Science.

My inventions have been merely improvements in the tools of the geologists,—in the odometer,—in the measuring divider,—

and in the aneroid barometer. I introduced the use of the ten-foot wheel in odometer work, when I was ordered to rectify the mile-posts along the Pennsylvania Railway, and then on my Broadtop and Westmoreland surveys. My micrometer was designed and manufactured in one of my visits to Neufchâtel. My twelve box aneroid was merely a long-entertained plan, realized by Mr. Becker of Amsterdam in his workshop in Brooklyn.

My chief service to American Geologists has been my early adoption and gradual introduction of contour curves in geological field work; in my persistent advocacy of equal vertical and horizontal scales for geological sections, and my use of contour curves for mapping beds and veins beneath the surface.

The only original ideas in geology for which I could venture to claim credit, are, 1. the determinations of the present system of surface drainage by the dimpled form of the plicated original surface, and 2. the production of all modern topography chiefly by the underground dissolution of limestone strata, of all ages. These fundamental ideas as I have long considered them to be, have not yet been discussed, and therefore not yet accepted, by geologists, and I must trust to the future for their justification. They are merely alluded to, or taken for granted in my writings, because my busy life has forbidden me to place their facts and arguments in a consecutive and extended form before the judgment of my colleagues in the Science; but I have taught them to my pupils in the class-room and to my assistants in the field and they will sooner or later come to be properly judged.

5. For the titles of books and memoirs I must wait until my return to Philadelphia, and for any reply to this very unsatisfactory answer to your circular.

Yours truly

(Signed) J. P. Lesley.

APPENDIX B

GENEALOGICAL NOTE.

PHILADELPHIA, *April* 23, 1890. PETER LESLEY TO HIS DAUGHTER MARY.

. . . I have found the following notes in an old drawer, in my own handwriting, written probably from my brother Allen's dictation, but perhaps from Aunt Hall's, about 1860, or before.

"Mrs. Sarah Call		(maiden name not given, and no date.)
"Esther Call,	married	W. Rand.
*"Sarah Rand,	married	John W. Allen.
"Eliz. Oswald Allen,	married	Peter Lesley."
"Peter Lesley,	married	Susan I. Lyman."

Sarah Rand born 1763.

(Her father old Rand died 1765.)

She was ten years old when the British troops burnt Charlestown and forced the Rands and Allens to fly to Boston.

She and John W. Allen were boy and girl together and were engaged to be married for seven years.

They "left for Philadelphia" in 1796. Both lived to an advanced age, she several years after he died.

"Sarah Rand was the youngest of nine children, her father dying two years after her birth.

"Her brother, Thomas Rand, a bachelor, lived in Salem.

"Her brother, Jonathan Rand, had a family in Boston (or Charlestown).

"Her oldest sister (?) married (*no children*) Deacon Miller of Charlestown.

"Her sister Esther . . . never married.

"Her sister Mellicent . . . never married."

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*Died in 1843. Letter from Peter Lesley in Princeton to his sister Elizabeth, dated April 5, 1843, mentions his grandmother Allen's death.

John W. Allen, her husband, was a printer; in Port au Prince, Haiti; then in Harrisburg, Pa., where one of their children died of yellow fever; then in Strawberry Alley, between Chestnut and Market Streets, Philadelphia. His daughter Harriet B. Hall (after losing husband and daughter) was female warden of the Eastern Penitentiary (under Sam. B. Wood) for many years, and there in the great room at the west end of the front building her father died, and then her mother. I have slept in that room many nights of my early life.

John and Sarah Allen had I think five children (or more). Mary Allen died in young womanhood and I have heard her praised by her sisters as beautiful and lovable.

Harriet Byron Allen fell in love with a fine young Englishman, a journeyman printer (perhaps apprentice) in her father's printing-office in Strawberry Street, and married him. John Hall must have been a fine fellow, for his widow mourned for him inconsolably all her life to an advanced age.

Margaret Hall, their only child, was a rare creature. She and my only sister Elizabeth were bosom friends. My Aunt Hall settled in Lancaster as a successful dressmaker, and had a number of nice girls in her employ when as a boy of five or six I lived with her some months, and saw Lafayette on his second visit to America. When Margaret died, about twelve or thirteen years old, Aunt Hall, broken-hearted, returned to Philadelphia and took the post of Woman Warden at the Penitentiary and died at about eighty.

Elizabeth Oswald Allen, my mother, was four years older than my father, who was twenty or twenty-one when he married her. All their children:—Allen (dying infant), Elizabeth, Peter, Allen, Henry, William, Alexander (died of scarlet fever at two years) and Joseph,—were born in the old wooden house north side of Vine Street, between Juliana and Fifth Streets. She died in the cholera year, 1832, when I was thirteen years old. Seven years afterwards my father married Mrs. Elizabeth Robbins (born Whitehead) by whom he had one child, Alexander.

Anna Allen, my aunt, married James Wilson, a paper-hanger, who was killed by the overturn of a car on the incline plane of the old Columbia R.R. at Columbia. Her life was a hard and bitter one, but she lived to be eighty years old. She had but two children, Sarah and Alexander. . . .

I give you these notes, dear Mary, for the sake of your children. Some day I may enlarge them. I am proud of my mother's family, humble, poor, virtuous, benevolent, beneficent,

endowed richly with the best faculties of heart and head of the old New England or English stock. They were beautiful without being handsome, winning the respect and the ardent love of everybody who knew them. A better blood strain for your children could not have been found. Their great-grandmother Sarah Rand was one of the best specimens of womankind that ever lived. . . .

APPENDIX C

Deaths of Lesley Family

(Buried in Laurel Hill Cemetery, Philadelphia.)

Extracted from Sexton's book, 2nd Presbyterian Church, Phila., May 5, 1855:—

Date Aug. 18, 1832. Elizh. Oswald Allen, wife of Peter Lesley. Amt. charged 2 Amount recd. 2.00 Age 42 years.
Sexton's fee—. Grave 3.00 D North 20 10 feet deep, the 3 spaces being 7 f by 7. 9 North and South.
Note. Two spaces reserved for the family of Peter Lesley, one on the South and the other on the north of the above D Nos. 19, 21.

Date Dec. 26, 1831. Alexander, son of Elizh. & Peter Lesley, 2, 2. 2½ years.

Date Aug. 19, 1818. Ann Lesley, 2. 41 years.

Date Aug. 26, 1818. Allen Lesley, son of Peter & Elizh Lesley, 1. 26 days.

Date April 11, 1819. Mary Lesley, wife of Michael Garnett, 2. 33 years.

Nov. 6, 1823. Caroline, child of James Lesley, 2 years.

Dec. 28, 1832. Catharine, widow of Peter Lesley, 76 yrs. Buried in grave of Peter Lesley (southern).

March 6, 1855. Peter Lesley, 62 years.

APPENDIX D

[In the following Biographical Notices there are a few descriptions of dates, etc., which I have not attempted to reconcile as correct.—EDITOR.]

BIOGRAPHICAL NOTICE OF J. PETER LESLEY*

BY BENJAMIN SMITH LYMAN, PHILADELPHIA, PA.

(New York Meeting, American Institute Mining Engineers, October, 1903.)

On the 17th of September, 1819, at Vine Street, below Sixth, in Philadelphia, a son was born to Peter Lesley and his wife, Elizabeth Oswald Allen. The child was not only bodily of large frame, but mentally of unusual inborn capacity; and in essential type of mind resembled rather the Celtic races, possibly through more or less remote inheritance from Gaelic or Gallic portions of his ancestry. For he belonged to that one of the two principal classes of all mankind which is quick in perception, thought and action, of excellent memory, keenly critical, vivacious, impulsive, demonstrative, witty, social, highly susceptible to the charms of decorum and other forms of beauty, easily becoming adroit with either tongue or hand (as is visible even in the regularity of the handwriting), self-confident and readily acquiring tact, "the art of all arts," as Emerson calls it so justly:

> "It lurks in the eye-beam,
> It leaps to its deed."

He was unlike the other class, which, more resembling the Teutons, is less ready to speak or to act, and is more inclined to the quiet, deliberate reflection that at its best may result in the excogitation of ingenious, complicated, or beautifully simple, and profound novel ideas. Though the mean between the two extremes is, perhaps, the ideal man, yet abundant brain-power (the distinguishing characteristic of genius,—not merely healthy vigor, but power, like the superior muscular strength of an elephant compared with a mouse) tends to mitigate or altogether prevent the shortcomings otherwise apt to beset each kind, and

*Published in the Transactions of the American Institute of Mining Engineers.

J. P. Lesley.

causes each to be universally admired. For instance, the venerated leader and lawgiver of the Old Testament called himself "slow of speech and of a slow tongue"; but in the New Testament the other type is held up to adoration. In our own country, Washington was rather of the more silent kind, and Franklin of the other; and in later times Grant and Lincoln differed in somewhat like manner.

It is evident, then, that each of the two types has its own, and perhaps equal, merits, but that brain-power is of the first importance to both. Brain-power is apt to be associated with general bodily vigor or to be inherited from generally vigorous parents; that is, from parents who have not, either of themselves or through their ancestors, been enervated by the self-indulging, unhealthful habits common to wealth and luxury. A desirable ancestry is, therefore, not so much one that runs back to some great man many generations removed, who can have yielded only infinitesimal influences of benefit to the present descendant, but an ancestry that has within a generation or two only vigorous progenitors, probably men and women that were occupied chiefly with some kind of bodily activity, and so were bodily strong and vigorous; yet with brains that have been somewhat exercised and invigorated. That is apt to be the kind of parentage that the famous great ancestors themselves had; and it is certainly better to be such an ancestor than merely to have one. Such a parentage had the child in question. For his father, Peter Lesley, was a cabinet-maker, working chiefly with his hands, and, therefore, vigorous of body; yet, at his trade and outside, using also his brain enough to give it healthful exercise and training. He was strong with brain and muscle, industrious, energetic, upright and a devout Scotch Presbyterian, insistent, in temporal affairs, on faithful, unquestioning submission to authority. "Did I not tell you what to do?" he upbraidingly asked of a workman who had grievously blundered. "Yes, but I thought ——." "Thought? You had no right to think!" His father, likewise Peter Lesley and a cabinet-maker, had emigrated from Aberdeenshire, Scotland. But the child held to various branches of the human race, and could lay claim to some South German and some English puritan blood; and the derivation of the family name would indicate a French origin. His whole future life was but an illustration of his inherited inborn nature, acquired from such a source, but to be modified by his surroundings, and especially by his early training.

He was his parents' first son, and received the father's name,

Peter. On growing up, he looked with self-depreciating dissatisfaction on his own name, as often happens with young folks; and in 1841 he devised, and for the future continued to use, the method of writing his name merely J. P. Lesley, instead of Peter Lesley, Jr.; simply transposing the J of Junior. The method has led to some amusing misconceptions. The charming author, Mrs. Lydia Maria Child, in a private letter nearly fifty years ago, remarked upon the peculiar appropriateness of his name, John Peter (as she supposed), combining the names of the two Apostles he so resembled in his loving and impulsive character. Another writer has supposed the name to be Joseph Peter, mistaking for his the geological reports of his excellent youngest brother, Joseph. In 1869 the form J. Peter Lesley appears to have been adopted by him for more formal use. In the first report (A, 1876) of the Second Geological Survey of Pennsylvania, the title-page bears the name of J. P. Lesley as its author; in the list of officers' names, Peter Lesley is State Geologist; and his own historical sketch of the first Geological Survey of the State describes the work of Peter Lesley, Jr. There is no indication to a stranger that all these three names belong to the same individual.

His childhood was passed in the family of his father, who was, as often happens with mechanics, far from being wholly uncultivated or confined to the brain-exercise afforded by his trade. The father was, in fact, not only intelligent, but unusually judicious in the early training of his children. He was an accurate draughtsman and an intelligent lover of architecture. He encouraged his children to draw, even before they could write; and during the dinner-hour would train them to accuracy of description of things or incidents, illustrated by sketches that must withstand his severe criticism. Yet he evidently did not with dry literalness discourage a tendency to the imagery of verbal illustrations; and the little Peter, born poet that he was, cannot have been repressed. His father's shop gave him the small American's much-prized privilege of constructing toy machinery and various apparatus, much after the fashion of our modern manual training.

The boy was the eldest of eight sons, but had one sister four years older than himself. Their mother (to whom the sight of a Madonna always, till his old age, brought his thoughts back) died when the little Peter was eleven or twelve years old, and his sister then took the place of "little mother" to all the youngsters; and an admirable one she was, with self-sacrificing, fond over-

sight. The young Peter, as eldest son, with his unusual powers of speech, was, no doubt, the favorite and especially favored child, and the one for whom the best education of the family was planned, and even the high profession of clergyman was desired; and about whom all the other children revolved as satellites, held to him by the strong attraction of respect and affection. It must have been his own inherited good instinct and the example of his loving sister and the constant practice of consideration for his younger brothers, perhaps also the consciousness of the lofty career planned for him, that prevented him from becoming quite spoiled, selfish and arrogant, with such attention on all sides. The result, however, was that he grew up remarkable for his generosity, and with a young prince's easy kindliness mingled with a tinge of superior dignity towards subordinates. His studious habits and orderly, well-behaved life, as well as his ready tongue, seemed from year to year to confirm his destiny for the ministry. It is said that on stormy Sunday afternoons he sometimes mounted upon a chair and preached to his admiring sister and brothers. Ordinarily, however, of a Sunday he went three times to church and twice to Sunday school; and he almost knew his Bible by heart, particularly the Old Testament. He devoured books; and chewed the cud, not by reflection merely, but with book in hand; and as a boy he read Bunyan's *Pilgrim's Progress* many times, and *Robinson Crusoe* yet oftener. He continued through life the practice of often re-reading favorite books, and in his later years he declared that he read Scott's novels every five years. As soon as he was six years old he was sent to the school of Wm. E. Tucker, teacher of the Second Presbyterian Church, and there he was thought to show special fondness for mathematics and geography. At twelve, he was advanced to an academy, and at fifteen to the University of Pennsylvania, then at Ninth and Market Streets. Those were the days of small things in the University and in Philadelphia schools generally, and it is sure that his literary advantages (and in education hardly any others were then thought useful) were decidedly inferior to those enjoyed by many university students of the present day; though he made the most of what opportunities he had. He became a member of the Phi Beta Kappa Society. No attention was then paid to physical education, gymnastics or athletics; and the tall, slender, eagerly studious stripling let his active brain quite outdo his bodily powers. It is not surprising, therefore, that on his graduation (A.B.), in 1838, he should be forbidden by the family physician to proceed at once with the intended theological studies.

While in this predicament he obtained (merely by an accident, it is said) the healthful position of sub-assistant in the Geological Survey of Pennsylvania, under Prof. Henry D. Rogers. It is easy to imagine that a young man of so lively a disposition should accept such an opening with high anticipation, and, perhaps, feel that he was receiving the Arabian box of magical ointment that should, on application to one eye, enable him to "see all the treasures contained in the bosom of the earth;" though he, doubtless, little dreamed how much his own future labors should help towards giving that power to himself and others. On the other hand, he evidently did not in the least expect to incur the result of applying the same ointment to the other eye, total blindness, or the extinction of that light of his soul, unquestioning religious faith, that had hitherto been his delight. There could be no anxiety on that score, for at that time the clash of resounding arms in the contest between geology and revelation, a part of the irrepressible conflict between science and religion, had scarcely begun to be heard in America. Although the new occupation was so different from what he had been looking forward to, he appears to have entered upon it with interest, cheerfully and zealously. As he once tersely said, late in his life, perhaps partly thinking of his own experience: "It matters not what the calling is, but how it is answered."

Geology, even in Europe, was then still in its childhood; American geology was hardly out of swaddling clothes; indeed, the earliest important State Survey reports were only in embryo. But the Pennsylvania Survey had in three years made remarkable progress in working out a general outline of the geology of the State, in ascertaining the main features of the geological structure, in discovering the magnitude of erosion and the bearing of topography as an indication of the underlying geology, and in the training of hitherto wholly inexperienced assistants, in great part mere boys, under a chief only twenty-six years old at the outset. "Topographical geology was born in Pennsylvania in 1838. . . . [In the Pottsville anthracite field,] Whelpley [then twenty-one years old] constituted himself the first perfect topographical geologist our science had."* Whelpley left the survey in June, 1839, after finishing in lead pencil his topographical map of the southern and middle anthracite fields.

To him, at Pottsville, the young Lesley, nineteen years old, went, early in that year, to learn the geology of the region, and to continue the collection of information from the collieries and en-

* *2d Geol. Surv. of Pa., Rept. A*, by J. P. Lesley, p. 79.

large the borders of the map with some of the Devonian country to the north and south. In 1840 he made a topographical and geological sketch-map of the country to the south of the anthracite as far as to the Kittatinny Mountain, from the Delaware to the Susquehanna, studying out the anticlinals near Port Clinton, and correlating the geology of Pocono Mountain with that of the Catskills. Mr. Rogers, in his report of that year (p. 6), says: "Much credit is due to Mr. Lesley for the faithful and laborious manner in which he has unfolded the geology of this occasionally complicated zone of country, and for the accurate and neat map which he has constructed of its formations and topography." He did that creditable piece of work before he was twenty-one years old. Throughout his active life he himself was inclined to put difficult, responsible work into the hands of very young and inexperienced men; though he admitted, late in life, that the plan would work well only with young men of unusual ability. From August, 1840, until deep snow fell, he, in company with Mr. Hodge, explored the Somerset and Fayette county coal-basins, detecting the small patch of Pittsburgh coal in the Ligonier valley, and identifying the same bed, with others above it, at Salisbury, in Somerset county, himself chiefly attending to the coal-beds. In 1841 he made a topographical and geological reconnaissance of the Fourth and Fifth Bituminous Coal-Basins, from Towanda to Kittanning and Punxsutawney; and then resumed work on Whelpley's anthracite map, to add what had been omitted and bring it up to date.

The State Legislature of the following winter made no appropriation for the continuance of the survey, pursuing a pennywise-poundfoolish policy, ostensibly excused by "the financial embarrassments of the Commonwealth," but, doubtless, still more due to the gross, unappreciative ignorance prevalent not only among the legislators, but among the so-called practical mining men of that day, and the consequently ever-increasing resistance of "a wave of suspicion and dislike pushed before it by the first Geological Survey through its whole progress."* The survey assistants were therefore disbanded at the end of 1841, and their chief was left with an immense undigested mass of their accumulated precious material, which he was naturally eager to publish, both for the benefit of the public and for his own and his assistants' credit. In hopes of that result, he did much at his own expense towards bringing the material into proper shape, and from time to time for several years renewed his efforts to induce the Legislature to undertake the publication.

* *Report A*, p. 112.

Meanwhile, Mr. Lesley, who had, during his geological work, been deeply and lovingly touched by the benighted condition of the inhabitants of the back valleys of Pennsylvania, revived his former plan of studying for the ministry, in hopes of fitting himself to be a missionary to them; and entered the Theological Seminary at Princeton in the autumn of 1841. He also, that season, took the degree of A.M. at the University of Pennsylvania. At Princeton, in addition to his study of Hebrew and theology, but especially during his vacations at Philadelphia in 1842 and 1843, he worked for about eighteen months, by Rogers's request, at putting together the materials that the Assistant Geologists had collected for the construction of a colored geological and topographical map of Pennsylvania, with thirteen long cross-sections. The work required the greatest patience and skill; for the materials, though partly well finished, were in great part extremely rough; and the best existing State map was "a wilderness of blunders," and the best county maps had to be adjusted together so as to humor their errors as well as might be possible. When the map and the thirteen long cross-sections had been drawn, several hundred local sections, columnar sections, diagrams and sketches were drawn, mostly to scale, for illustration of the Final Report. His great skill in drawing was there manifest.

After leaving Princeton Seminary and being licensed as a minister by the Philadelphia Presbytery, in 1844, he sailed to Liverpool. Thence he walked through England and, in a blouse with knapsack on back, through western and southern France. Among the fascinating French people he formed delightful friendships — "a better people cannot be found on the face of the earth," he says.* He met especially some of the celebrated Protestant families, and he visited the Pietists of Geneva and the Waldenses of Dauphiné. Some of his careful sketches of the steep, even vertical, mountain slopes of Dauphiné are beautifully reproduced in his *Manual of Coal and its Topography* (1856). He pushed on afoot through Savoy and Switzerland, across the Jura, and was

"Fortunate in being the first geologist who had an opportunity to approach the dynamic phenomena of the Jura with an American eye trained on this typical ground," † from the Blue Ridge, or South Mountain, to the Alleghany Mountains, "where, from the comparative deficiency of fossils and of coal, and from the repeated and elongated outcrops of a few valuable mineral deposits, the science of geology transforms itself into the science of

* *U.S. R.R. and Mg. Register*, August 24, 1872.

† *Manual. of Coal and its Topography*, p. 122.

topography." The moment he "beheld the ranges of the Jura with their combes and offsets, their vast escarpments and far-glittering white gaps, he felt at home among friends, where geologists born among them felt that they were strangers. For the valleys of the Jura are filled with later formations full of fossils, which the Appalachian valleys never are. There much is hidden, here all is told. The fossils themselves in the Jura distracted study from the topography. The topography also is gross, massive, simple, destitute of those lessons in detail, those innumerable [small] repetitions of the grander curves, from which we got our first instruction, and to which we retreat from insurmountable difficulties to learn how to return and overcome them." *

From the Jura and the "titanic groups of lines and curves of Bienne and Neuchâtel," he marched forward, again, through the Hartz, past the chasm of the Bodenthal (carefully sketched in the *Coal Manual*, p. 132) to Halle, to study a number of months at the University there under the celebrated pietistic theologian Tholuck, also Erdmann, Leo and Ulrici. He found Tholuck, famous as he was for orthodox piety, decidedly less narrow than some of his own American theological friends of those early days, and free to declare that "many things in the Bible are not true." In May, 1845, he returned by a sailing vessel from Bremen to Philadelphia.

His schooling was now ended. His strictly literary advantages had, no doubt, been far from the best; but he had diligently availed himself of them, such as they were, and his studies had taken a wide range. He had also seen something of the world in various countries, and had, doubtless, already lost all trace of dogmatic, ever-homekeeping, "frog-in-a-well" prejudice, and acquired that generous, appreciative sympathy with another's views that added such a charm to intercourse with him. His skill in conversation was wonderful, and he delighted to practise it; but he did not, like the celebrated Dr. Johnson and many other vexatious clever conversers, "talk for victory," or merely for a display of his own powers, but for the pleasure or profit of his companion as well as his own. Bodily, he was slender and tall, about 6 ft. 1 in., with no traces of the portliness he was inclined to in advanced years. He was near-sighted, and wore spectacles; and he was far from robust. Indeed, he was destined to be somewhat of an invalid all his life, because the activity of his brain was constantly outrunning his bodily strength.

After his return from Europe, he plunged eagerly into the enterprise of enlightening and converting his beloved Pennsylvanians of the back valleys. He took the position of colporteur, or circu-

* *Man. of Coal and its Topog.*, p. 124.

lator of Presbyterian tracts, for the American Tract Society, of Philadelphia; and rode 40 miles a day, besides frequent preaching and distributing tracts, through the northern and central parts of the State. He ventured to depart from his father's shop maxim, not to think, and, with his keen and highly cultivated critical acumen, finding some of the tracts more satisfactory than others, he naturally and conscientiously gave them the preference in distribution, a preference observed with disapproval by his employers, the Society. After two seasons of the constant "mental excitement, bodily fatigue and exposure," of this occupation, his broken health again compelled him to make a change.

In December, 1846, he accordingly rejoined Prof. Rogers, then living at Boston, and spent five months there in duplicating for him the State geological map and long cross-sections he had drawn while at Princeton, as well as several hundreds of the other drawings, and assisted him in arranging and duplicating the reports, preparing a large part of the text. The duplicates were transmitted to Harrisburg, and at the legislative session of 1848 a vain effort was made for an appropriation to publish them.

A long illness followed, possibly occasioned by theological troubles. While at Boston, he had probably preached occasionally in the orthodox congregationalist churches of the neighborhood; at any rate, late in 1848, he became the settled pastor of one of them, at Milton, a suburb of Boston. Soon thereafter, an incident occurred that deserves particular mention, not only on account of its important influence on the whole of his remaining life, but as an illustration of his hopeful, resolute, strong character. On an inauspicious-looking, chilly morning, the 13th of February, 1849, he married Miss Susan Inches Lyman, at Northampton, Mass. It was a veritable case of true love between exceptionally well-mated dispositions, and clearly an example of "marrying out of meeting;" for her parents (Judge Joseph and Anne Jean Lyman, since celebrated in Mrs. Lesley's *Recollections* of her mother) were among the early leaders of Unitarianism in Massachusetts. The immediate prospect of the marriage appeared to be infirm health for both and at best the enjoyment of "love in a cottage;" if not the adoption of a certain friendly lady's cheerful suggestion, that "it was enough for the pair to have the shelter of an umbrella, and if there should be children, parasols might be given them." The courageous young couple's undertaking, however, did, in fact, result admirably, the best proof of their own wisdom and capacity; and in the evening of their day, long past their golden wedding, they could look back upon an unusual amount of sunshine and suc-

cess of many important kinds. As for the cottage, small though it was for several years, it was, at its smallest, always so hospitably elastic as to have room for one more guest, and was as eagerly sought by rich and poor as if it were a palace.

The tract society in Philadelphia, or its friends, felt troubled lest the young preacher at Milton should promulgate error, and accordingly communicated with the association to which the church there belonged, and on May 5, 1849, withdrew his license to preach. The case is thus dispassionately described in one of Lyell's admirable books of American travel, singularly fair reports of keen observation and accurate information:*

"To exemplify the more regular working of the congregational polity within its own legitimate sphere, I will mention a recent case which came more home to my own scientific pursuits. A young man of superior talent, with whom I was acquainted, who was employed as a geologist in the State Survey of Pennsylvania, was desirous of becoming a minister of the Presbyterian Church in that State; but, when examined, previous to ordination, he was unable to give satisfactory answers to questions respecting the plenary inspiration of Scripture, because he considered such a tenet, when applied to the first book of Genesis, inconsistent with discoveries now universally admitted, respecting the high antiquity of the earth and the existence of living beings on the globe long anterior to man. The rejected candidate, whose orthodoxy on all other points was fully admitted, was then invited by an independent congregation in New England to become their pastor; and when he accepted the offer the other associated churches were called upon to decide whether they would assist in ordaining one who claimed the right to teach freely his own views on the question at issue. The right of the congregation to elect him was conceded, and a strong inclination is always evinced by the affiliated societies to come, if possible, to an amicable understanding. Accordingly, a discussion ensued, and is perhaps still going on, whether consistently with a fair interpretation of Scripture, or with what is essential to the faith of a Christian, the doctrine of complete and immediate inspiration may or may not be left as an open question."

The result was that the church society divided, and the much-beloved pastor continued to preach to one portion. He became so warmly involved in the discussion that he published a thin octavo volume † upon it; but it apparently had hardly any circulation, for almost the whole edition was, he understood, bought up and suppressed. His interest in the matter, however, quickly subsided, and within a very few years apparently vanished, and he continued to feel a warm affection for the orthodox church of his younger

* *A Second Visit to the United States*, London, 1849, vol. i., p. 218.

† *Address to the Suffolk North Association.*

days. His views, it is true, became by degrees less and less strictly orthodox and more completely unitarian. Probably this progressive change influenced his final abandonment of his pastorate in 1851; though the infirmity of his health was another strong inducement to return to the more healthful pursuit of geology. He was by no means tied to theology by the necessity of earning a living, even against conscience and honor. For, although he might be said to be at that time "as poor as a church mouse," he was not like Chaucer's imprudent mouse:

> "I hold a mouse's wit not worth a leke,
> That hath but on hole for to sterten to."

He still occasionally did geological office-work for Prof. Rogers, while yet a pastor, and

> "In [1850, or early in] 1851 he made a great map of the Shamokin anthracite region, for Mr. Rogers, a private undertaking. The country was crossbarred with section-lines staked at short intervals, and the map was made with hachures on a peculiar system of Lesley's own invention, equivalent to contour-lines." *

There is a manuscript map extant of the New Boston anthracite tract, by "J. P. Lesley, Topographer," to illustrate a private geological report by Rogers, of March 4, 1852, or perhaps earlier. The Pennsylvania Legislature, on April 14, 1851, made an appropriation for the renewal of the State Survey, in hopes of bringing it up to date, and for the publication of its results; and field-work under Prof. Rogers recommenced in the spring of the same year in the western, middle and southern anthracite fields, with a few assistants, and Mr. Lesley in charge more particularly of the office-work in the field. He made a great map, between 20 and 30 ft. long, of the Pottsville anthracite region, from Donaldson and Tremont to New Philadelphia, crossbarred in like manner, and with underground workings included. Little field-work for the Survey was done after 1851, but A. A. Dalson, with one assistant, was employed in 1852 to extend the sheets, and finally to make out of all the materials extant a reduced copy of the map of the whole anthracite region, the one finally published. The expected publication of the final report did not take place in 1855, owing to the neglect, bankruptcy or death of the contracting publishers and their successors; and in that year the Legislature made a new agree-

* *Trans.*, i., 190, February, 1872.

ment with Prof. Rogers, under which he published the Final Report in 1858.

In 1853 and 1854 Mr. Lesley made for the Pennsylvania Railroad Company "a great map of the country from Johnstown to Greensburg, in western Pennsylvania, covering parts of Westmoreland, Fayette and Indiana counties. It was 8 ft. long and 4 ft. wide, and was covered with fine contour-lines," * and was a marvel of topographical labor and skill. It was the first application of contour-lines to geological mapping; the previous work had been done with hachures even in Pennsylvania, where the topography had been found so important for the geology. He was now no longer dependent on Mr. Rogers for employment, but had become well known for his topographical and geological skill, and he made private surveys or geological reconnaissances of special tracts in various parts of the Appalachians, not only in Pennsylvania, but in southwestern Virginia and southeastern Tennessee.

In 1855 and 1856 he made, on his own account, a minute survey and contour-line map of the Broad Top semi-bituminous coal-field, with over eleven thousand stations levelled. The field was newly opened up by a railroad, new mines were starting, and he made separate maps and reports of different tracts as they were required by the coal operators or land owners. In 1856 he was mainly occupied with office-work, but sometimes was surveying in the field in his energetic way, rapidly handling the instrument, scribbling his notes and his strong topographical sketching, and keeping the young chainmen on the run, from seven in the morning, with a scant luncheon-time, until about five. Then, arriving at some log-cabin, to spend the night, he would fling himself on the floor exhausted, and fall asleep. He said he had formerly had a feeling of fatigue continuously for two years. It was his intention, after becoming State Geologist, nearly twenty years later, to have this valuable and geologically highly interesting piece of work at Broad Top published among the works of the Survey; but it was constantly deferred, because it would have required a good deal of additional labor to bring it up to date, with the underground workings, that had become extensive, and probably the demand for it was not sufficiently pressing, as compared with other work for the Survey.

In the winter of 1855 and 1856, at his home in Philadelphia, the multifarious task of completing the mapping of the summer's field-work, with one or two assistants, was not enough to prevent

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* *Trans.*, i., 191.

him from writing a book with numerous spirited illustrations beautifully drawn on the wood by himself: *A Manual of Coal and its Topography*, finally published in the following August. This modest little octavo of 224 pages was, in geology, an epoch-making book of the highest importance and novelty; for it was the first to show how clearly and strongly the topography often indicates the geological structure through the varied effect of the outcrops of underlying basins or saddles of harder or softer rock-beds upon the form of the earth's surface, the mountains, hills and valleys. He briefly, but no less vivaciously than correctly, describes, with many apt and striking illustrations, the varied results of the erosion of the outcropping surfaces of rock-beds of different hardness and dissimilar inclination. But, perhaps betraying some traces still at that time of the supernatural influences of his theological training, he insists, throughout, that the erosion was done by a cataclysmic flood rushing southward from the Arctic Ocean, and was accomplished "with infinite force and speed, and ceased forever," in the way Rogers had conjectured. Lesley, however, already feels doubt as to the correctness of Rogers's twin conjecture, that the rock-folds had likewise instantaneously been caused just previously by immense waves of the molten interior of the earth raised by tremendous cataclysmic earthquakes, waves rolling northwestward and steep on the northwest side, and gentle on the southeast; yet he displays unstinted admiration for the grandeur of the idea. The book also gives concisely his excellent practical methods of topographical surveying, the result of his own experience in an art that was at that time little understood and still less practised in America, even by engineers to whom topography was important. Only a small edition of the book was printed; and it has been too little read, too seldom understood, and appreciated by too few. After the lapse of some years, he dreamed of rewriting it, with a young assistant's help in the surveying part. But though the plan was discussed from time to time for many years, the moment of convenient leisure never came. Its careful, painstaking way of really surveying and making an accurate topographical map, in order to study out the geology, is distasteful, compared with the magical plan of perceiving the subterranean facts merely by second sight.

His reputation as a geologist of the first rank was now firmly established in view of the whole world. He had already become favorably known personally to the foremost scientific men of America, through his regular attendance at the yearly meetings of the American Association for the Advancement of Science from its

second meeting, in 1849; and through his agreeable participation in their public and private discussions.

In the autumn of 1856 he became Secretary of the American Iron Association, at Philadelphia, a strongly managed organization of iron-masters for the promotion of the American iron manufacture; and he entered upon his new duties with his usual zeal and energy, resolving to devote himself for at least a year or two to iron, and to learn everything about it that could be learned. He had hitherto leaned towards free trade, but now, on further investigation, became thoroughly in favor of protection, and continued so the rest of his life. The immediate aim of the Association at that moment was to gather for the first time complete statistics of the iron manufacture throughout the United States including, so far as possible, the name, situation and principal dimensions and characteristics of every iron-work that had ever existed in the United States, and the product of each in each of the last preceding three years. It was impossible to get all the information by correspondence, and he visited many works himself, especially during the first six months, and sent out one or two young assistants travelling for the purpose, until the end of 1857; while he carefully edited their notes, mainly in tabular form, illustrated by maps of his own. The results were issued in the form of bulletins to members of the Association, amounting to about 170 closely printed quarto pages by June, 1858. By the next April he had prepared and published for the Association a large octavo volume of nearly 800 pages, *The Iron Manufacturers' Guide*, one-third made up of a brief notice of each of the iron-works, and more than half being a discussion of the geological occurrence of the ores. Though, in part, compiled from other sources, the book contains much original matter, and is a highly valuable work. Among the illustrations are several maps drawn by himself and his accomplished youngest brother, Joseph, an admirable draughtsman; "younger by" eleven "years, brother at once and son." The maps were with one exception the first photolithographs ever published, a style of reproduction from which Mr. Lesley had from the first great hopes, and with special reference to which he in future drew most of his maps in bold black lines on white paper. The *Guide* was practically his last important work for the Iron Association; though the organization continued probably in a state of partially suspended animation, perhaps continuing the statistics of production from year to year, and he continued as Secretary at least as late as 1864.

His brother Joseph had in 1857 returned from a couple of years' study in Europe, and not long afterwards the two brothers

formed a copartnership as "topographical geologists." But it was soon dissolved; for Joseph became for the seasons of 1858 and 1859 an assistant on the Kentucky Geological Survey, and in 1860 on the Arkansas Survey; and, not long after, permanently Secretary of the Pennsylvania Railroad Company.

Early in January, 1858, while Mr. Peter Lesley was visiting iron-works in southern Ohio, some of his friends succeeded in having him elected to the librarianship of the American Philosophical Society, a position which he gladly accepted, not so much for its meagre salary as for the congeniality of its duties; though he would have been unwilling to lift his finger to supplant another incumbent, however incompetent. At the beginning of the next year he was elected one of the four secretaries, and the work of all the secretaries fell principally to his lot as Librarian. He continued Librarian until he resigned, at the end of 1884; and Secretary until he was elected Vice-President, at the beginning of 1887; and, after that, Vice-President until he declined re-election, at the end of 1897. During his term as Librarian and Secretary he was the life of the Society, the editor of the *Proceedings* and *Transactions*, the contributor of about sixty-five set papers to them (besides numberless unrecorded valuable impromptu remarks), and the hospitable receiver and inciter of important communications from others. He naturally became enthusiastically attached to the Society, and was warmly appreciated by it.

On becoming Librarian, he zealously undertook to make a complete catalogue of the library, a work hitherto never done. Learning that the Harvard College library was catalogued upon cards, then a new method, he readily perceived the merits of the plan, and adopted it. He, however, went further, and began a book catalogue of the library, classified by subjects according to a system devised by himself.* It was published in three volumes, in 1863, 1866 and, finally, 1878. These absorbing duties, at first with no assistance, in addition to what he was still doing for the Iron Association, kept him busy, without, for the first year or two, his undertaking so very much geological field-work. In spite of his ample occupation, he, in 1859, became permanently Professor of Mining in the University of Pennsylvania.

In 1859, he also took charge of the guidance of large topographical and geological survey of some of the lands of the great Coxe estate, near Beaver Meadow, in the anthracite region; and he occasionally spent some days there in person. The field-

* Described in *Man's Origin and Destiny*, p. 8.

work was done by assistants, including Mr. Eckley B. Coxe, then recently out of college, and one or two of his brothers and cousins, a jovial, but industrious, party.—"The critical accuracy of Mr. J. P. Lesley, of Philadelphia, previously obtained to superintend the press and revise the proofs" of the Arkansas Second Geological Report (1860), a handsome volume of 433 pages, appears to have been merely "an unconsidered trifle" in his manifold activity.—In 1861 he spent a couple of months in Montreal, with Mr. T. E. Blackwell, Managing-Director of the Grand Trunk Railway, furnishing him with various geological data, and constructing a geological and topographical map, 15 ft. square, to illustrate the iron resources of the United States.

From 1860 to 1866 Mr. Lesley's geological skill was in great demand for private surveys, especially as the Civil War increased the demand for coal and iron. In 1862 he spent several weeks in surveying coal lands in Cape Breton, which had just been thrown open to general occupation, and had been partly acquired by a Boston company. He worked out the geology of the field, and made it for the first time public in the Proceedings of the American Philosophical Society. For the purpose, he carefully measured in detail over 900 ft. in thickness of the rock-beds exposed in high cliffs along the seashore, in some places without a beach immediately below, and only accessible by being let down with a rope from above, just as:

> "Half-way down
> Hangs one that gathers samphire, dreadful trade!
> Methinks he seems no bigger than his head."

The faithful countrymen who helped him marvelled at his intrepidity, and warmly declared: "He will go anywhere!" One of them seeing him unwittingly stand dangerously near the edge of the cliff, to save him, made bold to be so terribly rude, in his own opinion, as to knock him to the ground; but on humbly asking pardon was charmed at his immediate amiable acquiescence and gratitude. In 1863 he spent several weeks there again, and with the help of a young assistant through a longer time he extended the survey, and made it more detailed; and successfully opened coal-beds a mile or so from their nearest previous exposure, after the instrumental survey had closely ascertained the probable place of outcrop, in that field of remarkable uniformity in the lay of the rock-beds. During his stay in Cape Breton his eyes were open also to other matters than mere geology. An aurora borealis of striking character came under his careful ob-

servation, and he fully described it in a paper before the Philosophical Society.

He returned home to Philadelphia; but about October 1, 1863, at the request of the Pennsylvania Railroad Company, he sailed for England and the Continent, to examine into the methods of hardening the surface of rails and the success of the Bessemer process. He travelled rapidly through England, Belgium, Paris, western and southern France and Austria, ate his Christmas dinner with Tholuck and Erdmann at Halle, and was away from home only a few months. Among other places, he saw the Jura again. He had for two or three years been reconsidering his former adherence to Rogers's opinion, that the Appalachian erosion was effected almost instantaneously by a cataclysmic deluge from the Arctic Ocean; and soon after this second visit to the Jura he altogether abandoned that extravagant hypothesis of supernatural times.* Indeed, his native disposition, if not his early education, more inclined him to seek natural ways of accounting for the phenomena of the world, and he particularly abhorred the sensational in geological conjectures.

In 1863 and 1864 the value of Pennsylvania rock-oil produced became great, and occasioned several surveys by him; for he had been in 1862 (or, possibly, 1859) probably the first professional geologist to be required to investigate its mode of occurrence, and was certainly the first to form rational views on the subject, in opposition to the superficial or interested opinions long tenaciously held by many so-called practical men, some of them a grade above the divining-rod men. He from the first (see his article on "Coal Oil" in the *Department of Agriculture's Report* for 1862) saw that rock-oil had its origin in the decomposition of organisms, and that it was by no means confined to anticlinal summits, nor to the valleys of streams. In 1864 (as published in 1865) he estimated that "the third oil-sandrock" of Venango county might probably exist at about 1,100 ft. below the Allegheny River at Brady's Bend, a depth hitherto untried for oil-wells, and the place 30 miles distant from the nearest oil-wells previously bored. Early in 1866 he was gratified to learn that the oil-rock in question had been found there at a depth of 1,089 ft.

In the spring of 1863 a stranger from West Virginia called at the Library and described to him the peculiar occurrence, then unknown to the scientific world, but since celebrated under the name of Grahamite, a vein of solid bitumen filling a fissure across

* "Five Types of Topography," *Am. Phil. Soc. Trans.*, 1866, xiii., 310.

the nearly horizontal rock-beds. Mr. Lesley at once perceived the importance and interest of the matter and the evident truth of the description; and he brought the matter before the world in a paper read to the Philosophical Society, getting a young friend to make for the purpose some assays of the new substance. In 1865 he made a trip to Gaspé, on the lower St. Lawrence, to make a report on the oil lands there.

About 1862 he and several of his scientific friends earnestly discussed the desirableness of forming a National Academy of Science, that should be limited in number and more select than the American Association for the Advancement of Science, and should have its meetings less encumbered with unsatisfactory communications. He was decidedly in favor of the enterprise, thinking that the exclusive character, and what might possibly be considered the aristocratic appearance or desires of such an organization, would not be distasteful to Americans, nor really inconsistent with their democratic principles. The Academy was incorporated by the United States Congress in 1863, and he was one of the original members, and continued to be a member throughout his life.

About the beginning of 1866 he delivered a course of lectures before the Lowell Institute, at Boston. He published them as a thick octavo volume in 1868, and again in a revised and enlarged edition in 1881. He says in the preface: "The book is merely a series of familiar conversations upon the current topics of interest in the scientific world;" and a critic has well characterized it as "fresh, breezy, original, helpful, invigorating, with frequent brilliant and forcible passages, stimulating, incisive observations and forcible arguments, a spirited book, instructive with its learning and its abounding facts." Among other things, he discussed, particularly in the first edition, his theory of "Arkism," that had been a deeply interesting hobby to him for about twenty years. Already, in 1856, he had long had a thick folio volume for recording alphabetically occasional notes in corroboration or elaboration of the theory. His view was that after the Noachian deluge, or whatever may have given rise to the myth, the Ark and its accompaniments, the mountain and the waters, became sacred objects that were by the priests made to recur symbolically, in art, especially architecture, or in words, singly or variously combined, in a thousand different forms. As the myth reappears in many countries of no special linguistic or racial connection, so he believed these words and their derivatives could be traced among otherwise unrelated languages. Early in 1857, taking

Pallas's great work of comparative vocabularies in many languages, reduced injudiciously (as Rémusat has pointed out) to Russian letters, instead of to Roman, he prepared etymological illustrations of a paper for the American Association for the Advancement of Science. He argued that numerous etymological resemblances and transformations, in accordance with philological laws of derivation, sometimes had a mythological, priestly or missionary origin, rather than a purely linguistic one, and therefore in some cases did not indicate the racial affinity that had been supposed to exist. It was not the idea put forward by Grotius and reinforced by the approval of the great philologist, Klaproth, and, if cautiously handled, not altogether condemned by Rémusat,* that "the pure language is nowhere extant, but its remains exist in all languages." On the contrary, Lesley's theory explains the word-resemblances without appealing to mere linguistic derivation. His more pressing occupations, however, prevented him from riding his hobby for many years, beyond a paper or two in the early years of his service in the Philosophical Society. But as late as 1891, in a paper in the Proceedings of that Society, he shows that he "still regarded that line of investigation as one entirely germane to modern scientific research;" though he had neglected it for so many years. It is not clear whether he had practically abandoned it from a perception of the difficulty of sufficiently demonstrating it by means of etymological resemblances, that are so often conceivably capable of other explanations; or from realizing the great labor and time that would be needed to complete the demonstration by reinforcing the etymological part by a thorough collection and methodical display of the religious and art symbols; or, lastly, had begun a little to doubt whether the deluge-myth itself could really have played so impressive a part in the world's history.

In 1864 the demand for geological surveys through Pennsylvania and other States was at its highest, and he was hard-worked to the extreme, with handsome results to his pocket, but exhaustion of his strength and health. Among the numerous mining operations that he was consulted about, in this busy period, one or two were geologically so unusually promising as to entice him into participation; notwithstanding his whole life's training had been rather unfavorable to his enjoyment of the commercial side of such an undertaking, though his natural abilities were so

* *Mélanges Asiatiques*, 1825, vol. i., p. 274.

suitable for success of that kind. In 1858 he had warned a young friend about to embark permanently in geological work, that it would create an increasing distaste for mercantile affairs. He himself was a couple of times drawn into them; but his experience then changed his distaste into downright distrust or even horror; though he escaped with only trifling loss, if any.

In spite of threatening symptoms and occasional illness, he kept on with his driving labors through 1865; but by the middle of 1866 his nervous system had completely broken down, and he had to give up work and go to Europe, attended by his wife, for an absence of about two years. He was some time at Pau, and three months at Paris. He had been appointed by the United States Senate one of its ten commissioners to the Paris Exhibition of 1867, but increasing illness there finally compelled him to abandon his duties. Of his experience of the hasty, imperfect preparations at Paris for the crowds of visitors he wrote (editorially), six years later: "We remember but too well the rudely built and freshly plastered houses in which we found miserable shelter and wretched service during three long and weary months in 1867, until we fled from Paris with a prayer that we might never see it again." He then walked through the Vosges Mountains, and spent the rest of the season at Vevay, in Switzerland; and then went to Egypt. There he and his wife made a trip up the Nile to the First Cataract in one of the Viceroy's yachts, as guests of the accomplished American Consul-General, Mr. Charles Hale, along with Mrs. Lesley's lifelong friends, the Consul-General's two sisters, one of them the author of several books, among them *The Peterkins*, in which Mrs. Lesley appears as the sensible "Lady from Philadelphia." It was altogether a literary party, with such a light accessory amusement, at one time, as writing a novel, each daily chapter by a different member of the party; not by any means in harmonious collaboration, but in diverting contest. Mr. Lesley became deeply interested in the study of Egyptology and hieroglyphics for the rest of his life, and he published several papers on Egyptian subjects in the *Proceedings of the American Philosophical Society*. From Egypt he returned to Italy and England, and so home again by the spring of 1868; but could do little work the rest of that year, nor, indeed, his ordinary day's work, until the end of four years.

In May, 1869, however, besides his Philosophical Society duties and occasional private geological surveys, he consented to become the editor of the *United States Railroad and Mining Register*, a weekly newspaper of enormous folio size, published at

Philadelphia in the interest, more particularly, of the railroads; and he continued to be its editor until the end of 1873. The paper not only contained railroad statistical matter and reports and news, and frequent republication, in full or in abstract, of scientific papers with their photo-engraved illustrations that had been read before the Philosophical Society or elsewhere in America or Europe, but weekly he wrote for it fresh, breezy, cheery, clear-cut, picturesquely flower-bestrewn, spicy, authoritative editorial comments on railroad, mining, surveying, geological, scientific, philosophical, theological, political, politico-economical, American or European subjects of the day; in short, on things of every sort, and some others. These remarks of his are still entertaining, and are particularly interesting as indications of what occupied his attention during that period; though they are now almost irretrievably lost, from being buried within the leaves of an unwieldy sheet that its very form prevented from being kept accessibly on file. Opening the rare sheets almost at random, you meet with a characteristic remonstrance against the despairing outcry of his good friend, President Barnard, upon three apparently dreadful and already threateningly prevalent scientific doctrines, seriously preferring, if need be, the bliss of complete ignorance. Lesley, on the contrary, while praising his charming friend, yet insists on fidelity to science, to knowledge against ignorance, in the following characteristic words (December 13, 1873):

"How strangely he submits to fears of imaginary dangers! How he betrays science to her theological enemies! Where is the eagle's eye that gazes at the burning sun? Where is the faith that says: 'Though He slay me, yet will I trust Him'? Is truth no longer the representative of God, the revealer of immutable good, the guarantee for the *summum bonum*, the only gate into Paradise? . . . If President Barnard believed, as we do, that the three hypotheses of 'spontaneous generation,' 'organic evolution,' and 'the correlation of mental and physical forces' were not only not yet proved, but not at all likely ever to be proved, we could understand his language of fear. . . Many a sweet spirit will acclaim President Barnard's sad predictions and feel a gentle pleasure in their pain. But we trust that many a presumptuous young speculator in science will get from them a reinforcement of that religious awe which after all should temper the hot haste for discovery, and that unseemly rush for enrolment in the ranks of innovation which takes for granted all new hypotheses as if they were already theories, and enunciates every probable theory as if it was already engrossed by an unanimous vote among the constants of science."

The Darwinian theory had then for a number of years been fighting its way, and had been the subject of warm discussion wherever scientific men were assembled; and Mr. Lesley partici-

pated, with inclination towards the theory, as he would occasionally confess, yet never fully adopting it. Twenty years later, when the theory had gained almost universal acceptance even among theologians, he was fully decided, and would at times express complete disapproval of it. But that would, perhaps, be regarded by its friends as merely proof that senile decay had already begun.

In 1872 the University of Pennsylvania, somewhat enriched by the sale of its central old home for the post office, removed to West Philadelphia, and was much enlarged. Instead of Mr. Lesley's professorship of mining, held since 1859, a professorship of geology and mining was given him, and he was made Dean of the Scientific Department. In 1875 the University made him Dean of the Towne Scientific School, founded at his suggestion by his public-spirited, good friend, Mr. J. H. Towne, who had been one of his ablest coadjutors in the American Iron Association. The duties of the new professorship and of the deanship were now more absorbing, and took a large share of his time and attention; and sometimes his anxieties about the students would keep him awake at night. In those days there seems to have been a rude struggle between students and — not policemen with clubs, but — the professors themselves. A little incident displayed the boorish manners of some of the students, not bumpkins from the backwoods, but even young men bred in the city, supposedly with every advantage. At the same time, Mr. Lesley gave ample proof of his victorious readiness of wit and of the well-merited severity to be expected from even his sweet disposition under great provocation. He was beginning a lecture on the geology of Pennsylvania, with the two huge quarto volumes of Rogers's Final Report before him, and declared to the class that this among books (using Bacon's famous words) was one of the "few to be chewed and digested." Thereupon, an impudent youth, supposed to be gilded not only outside, but inside, from at least two antecedent academic generations, thinking to be impertinently facetious, spoke up, and said: "Why, Professor, would that not be an indigestible meal?" Another youth, likewise gilded, chimed in, that he "should think so, too." Mr. Lesley stopped an instant, looked at them, and said: "Yes, I believe you are right; you two would better stick to thistles!" Such severity, however, was unusual with him, and, of course, would in future rarely be challenged; and naturally such all-conquering wit, in addition to his other attractive qualities, caused him to be much admired by young students.

Another incident of the time of his active professorship will

illustrate his industry and his way of resting. A young assistant, going into his office one Saturday, found him hard at work in his shirt-sleeves, and with perspiration streaming from every pore: "Yes," said Mr. Lesley, "I found latterly that I was getting used up by overwork, and so I am taking a holiday to rest, and am making a relief-map." He had apparently discovered some lobe or convolution of his brain that was not thoroughly exhausted, and was hastening to give it a chance to become so.

He had for many years taken great interest in relief-map making. About 1854 he had made for the Pennsylvania Railroad Company a relief-map, with unexaggerated vertical scale, of the region to be traversed by the railroad in crossing the Alleghany Mountain, correcting the extravagant impressions produced by the enormously exaggerated profiles commonly used by civil engineers. Early in 1866 he made a model of the underground workings of the Hutchinson anthracite mine, at Plymouth, Pa. In 1873, at the University, with the help of Mr. John H. Harden, aided by some of the students, he had a number of relief-maps constructed; and, again, after becoming State Geologist, a number of others.* His long experience and sound geological judgment led him to protest strongly against the needlessness and harmful misleading of an exaggerated vertical scale in relief-maps. He justly said:†

> "No relief of the surface is too delicate to escape the human eye when represented with sufficient skill and care in modelling. . . . If a relief-map be not true to nature, what is the good of it? Geologists have been forced to abandon exaggerated cross-sections; why should they permit relief-map makers to revive the discarded error, and put the representation of the whole in antagonism to the representation of the parts?"

In 1874 he had a number of copies of half a dozen of his reports and papers on iron and coal-fields of the last preceding three or four years bound up together for private distribution, namely: Lyon, Shorb & Co.'s nearly 80 sq. miles of brown hematite lands in the Nittany Valley; South Mountain iron-ore lands; North Carolina Tuscarora iron-ore belt; the Embreeville (E. Tenn.) upthrow fault; the geological structure of Tazewell, Russell and Wise Cos., Va.; coal and iron lands at Ursina, Somerset county, Pa. The reports and papers are all handsomely illustrated with

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* "The Construction of Maps in Relief," by John H. Harden and Edward B. Harden, *Trans.*, 1887, xvi., p. 298.

† *Science*, vii., p. 58, and *Trans.*, xvi., p. 295.

his characteristic topographical maps, sections and landscape sketches. This readiness of apt and pleasing illustration added greatly to the value and attractiveness of his reports. The volume is but a small collection of samples of a far larger number of pieces of like work that had been printed privately, or published as papers in the Philosophical Society. But much of the results of his personal field-work has never been printed, particularly the more extensive surveys: for example, his great contour-line map of the Kiskiminetas and Loyalhanna country for the Pennsylvania Railroad in 1853 and 1854; his Broad Top survey of 1855 and 1856; his Cape Breton coal-field surveys of 1862 and 1863; his surveys of the Tennessee coal-fields west of Knoxville; and others.

In 1874 he became the State Geologist of Pennsylvania, and began the Second Geological Survey of the State. He was now fifty-four years old, and besides his unusual natural qualifications and his thirty-five years of remarkable geological experience and reputation, his long and honorable connection with the first survey, his having constructed its State map from the mass of hitherto undigested materials, and his extraordinary familiarity from direct personal observation with the geology of all parts of the State clearly pointed him out to every geologist as the man of all men for the position; and the State was so fortunate as to discover the fact and secure his consent. Indeed, although the pecuniary compensation was small, compared with what his private practice would bring, and the responsibility was heavy and unceasing, he entered upon the new undertaking with enthusiasm. For he had through many years been anxious that a thorough survey should be made of his well-beloved, magnificent State, so richly endowed with useful minerals and so abounding in geological problems of the highest theoretical interest and enormous practical importance; and he must long have been fully conscious that there was nobody in the world who could compare with him in fitness for taking charge of the work.

The Legislature, however, imperfectly aware of even the direct commercial value of such special fitness for work of that kind, and perhaps inclining rather to the opinion that the utility of geological surveys is generally doubtful, and at best remotely indirect, made only quite moderate appropriations, for a State of such immense mineral wealth, and those, after a few years, only from one session to the next. The assistants were, accordingly, for the most part young beginners; and in many cases, when they had gained experience, they were drawn away to less precarious and more lucrative work. At every meeting of the Legislature, special

efforts must be made to enlighten it and induce it to continue the Survey. Mr. Lesley is said to have gone once in person to the Legislature; but was never willing to go again, showing himself "just like a child as to the way such business was done." He, doubtless, well illustrated what he had himself indignantly said in the *R.R. Register* (in 1869, October 16), when some scurrilous newspaper had declared that the Academy of Natural Sciences was log-rolling for a plot of ground for its new building:

> "A more helplessly innocent organization, for political purposes, cannot be imagined. They can log-roll in the woods for coleopterous insects; it would be rare fun to see their awkwardness if they were sent to Harrisburg to lobby for a donation of public land for themselves or anybody else."

He took pains to avoid one mistake of the first Survey, and did not let all the materials accumulate until a sudden cessation of the appropriations should leave it impossible to publish them at all for many years, while they were becoming, in great part, out of date. The work of the assistants was put in shape for prompt publication. In some cases they had not been so fortunate as to have the benefit of the best literary training; and responsible, as he unquestionably was, for the published form, and in some degree for the substance, too, he did a great deal of conscientious editorial work, making the reports intelligible and methodical, and even practically rewriting some of them. The mapping and the illustrations, in like manner, passed under his close scrutiny and revision. In addition, he wrote long elucidating prefaces to most of the volumes in his usual vigorous, lively, clear, straightforward, trenchant style. There were, in all, 120 volumes of reports and map-atlases, besides Mr. Ingham's handy little index-volume for them all.

Yet with all this attention to the details, he still found time for several volumes by himself. He began the series of reports by *Report A*, an *Historical Sketch of Geological Explorations in Pennsylvania*, written at the beginning of the Survey, and published in 1876. It was in his usual lucid, cheery style, and contained much hitherto unpublished information in regard to the first Survey, and many valuable pertinent discriminating comments. It had been his intention to continue in the same volume a sketch of the history of other American State Surveys; but the pressure of other matter to be published interrupted the volume at the end of page 200, and, with the ever-accumulating mass of material of the new Survey, the convenient time for its resumption never came. In 1885 he published his *Report X*, a beautiful collection of geological maps

of all the counties in the State, on a uniform scale of 2 miles to the inch, with uniform coloring, arranged in octavo form, and preceded by text of his own, briefly pointing out the leading geological features of each county.

In 1889 and 1890 he issued *Report P* 4, a *Dictionary of the Fossils of Pennsylvania*, in three volumes, compiled by himself. It contains illustrations of all the known fossils of Pennsylvania, except the flora, already reported upon by Lesquereux and Fontaine; and all are arranged alphabetically, for the most convenient reference from the county reports, where they are mentioned by the different assistants. This is a handy reproduction of an immense number of fossil figures gathered together from many widely scattered sources which are carefully referred to; in many cases, sources that are out of print and difficultly accessible, and in some instances rare. Professed paleontologists at first looked askance upon a work in their own field by one who did not profess to be one of them, and a work not zoölogically arranged; but in time they came to value it more highly, and Dr. Clarke, the State Paleontologist of New York, has, in his biological enthusiasm, claimed that the *Dictionary* is more sought for than any of the other reports of the Pennsylvania Survey. This is, however, a decided (of course, unintentional) exaggeration, though not without some shadow of a foundation. Mr. Lesley had always had the highest admiration of paleontology, though aware that in Pennsylvania its immediate usefulness in helping to work out the geology was not generally so important as in some other regions. He bore in mind that*

"When the geological survey of Pennsylvania was first ordered, its first business was well understood to be not scientific, but practical. It was to study and to find out all about the iron, coal, oil, gas and other mineral resources of the State. . . . This task the Survey has faithfully and zealously performed for fifteen years; and its strictly practical character is acknowledged by those intelligent business men who are the wealth-producers of the State." Nevertheless, he adds: "I had always realized that the Survey would leave unperformed one of its necessary tasks if it did not fully explain the fossil geology of the State, as a supplement to its mineral geology; but the practical work of the Survey was so heavy that any adequate report of its fossils had to be left to the very last."

He himself also undertook the writing of the *Summary Final Report*, a condensation and methodical rearrangement of the results of all the previous reports; and he accomplished two volumes

* *Report P* 4, p. vi.

out of the four, and nearly half of the third (or of the first part of the so-called third, which is bound in two thick volumes). His health then (in 1893), under such long-continued heavy strain, with his increasing years, broke down so completely that he had to give up work almost entirely, and the report was finished by Messrs. E. V. D'Invilliers and A. D. W. Smith, with only comparatively slight occasional consultation with him. It was naturally disappointing to Mr. Lesley to be unable to lay the cap-sheaf upon the greatest work of his life; but to his kind soul the bitterest regret was that he was unable, in doing so, specially to show his warm appreciation of the aid he had received from his assistants. One of them, however, Prof. J. J. Stevenson, in speaking of the *Report*, says: *

> "In this marvellous compilation he gave a synopsis of every assistant's work, according unreserved recognition to each observer, and frequently showing an unselfish neglect of credit due to himself for earlier discovery of facts and determination of principles."

All the assistants, with scarcely an exception, gratefully appreciated his never-failing generous consideration towards every one of them; and some were ready to adore him.

The 120 volumes of reports and atlases of the Survey are, indeed, his great "monument more lasting than brass." As he truly says, the practical character of the Survey was always kept in view, and the constant aim was to gather knowledge that would have a useful bearing upon the working of the coal, iron, oil, gas and other minerals of the State. Invaluable work was done in the detailed survey of the anthracite region, under the able direct management of Mr. Charles A. Ashburner at first, and later under Mr. Frank A. Hill; with an extremely careful compilation of all the maps of the underground workings of all the mines, and with much of the surface topography, all reduced to one scale and published on a great number of sheets, with numerous cross-sections and columnar sections. Such work is not of general popular interest, and is little seen outside of the coal regions; but is there of the utmost utility. The bituminous coal-fields, the oil and gas-fields, and the iron-ores were also carefully treated. Of course, in such fields, and to some degree in all other parts of the State, mining and exploration are constantly going on, new facts are daily coming to light; and it was Mr. Lesley's earnest desire that there should be a permanent geological survey established for the perpetual

* *Science*, July 3, 1903, vol. xviii., p. 3.

gathering and recording of such useful information, which, if not properly gathered and recorded, soon becomes lost forever. He was as far as possible from imagining that his Survey was a finality, or that every important fact had been discovered, and every serious problem solved.

He not only aimed to have the Survey work and investigations of an entirely practical character, but to have the results reported in language that would be simple, clear and readily understood. He appears never to have ransacked the Greek and Latin dictionaries to construct new-fangled words for the expression of novel ideas or for the adornment of new classifications, nor did he undertake to reform our ordinary English language by transferring poetical words to prose; though with appreciation he acquiesced in devices of that kind deemed advisable by others. It could not have been ignorance that kept him from thinking to propose such changes. On the contrary, it is more likely his good knowledge of Greek and Latin and poetry and English made changes of that kind seem unnecessary or distasteful. At any rate, the older he grew, the more he aimed at using the simplest language; and he sometimes took special pains to devise a good Saxon equivalent of some sesquipedalian term derived from the classical tongues. His good schooling, too, and ample experience seem to have led him to look with little sympathy upon various minor so-called scientific reforms, that appear important to the less thoroughly trained.

He found time during the eighties to write a number of outside pieces, notwithstanding his geological and ordinary Philosophical Society work. He had, owing to the heavy stress of his other duties, ceased teaching at the University in 1878, receiving in 1886 the honorary title of Professor Emeritus, for the rest of his life. He published a second edition of *Man's Origin and Destiny*, with six new chapters, in 1881. In 1882 he published *Paul Dreifuss, His Holiday Abroad.* He edited in 1885 the *Early Proceedings of the American Philosophical Society from the Original Records*, 1744–1838, a thick octavo volume. He contributed, in collaboration with Rev. Charles G. Ames, the article on "Pennsylvania" in the *Encyclopædia Britannica*, published in 1885; and wrote a number of articles for such periodicals as the *Forum* or *Nineteenth Century*, as well as for newspapers. But all these prolusions, that would have been serious work to some men, seemed to be for him mere trifles, safety-valve escapes of superfluous steam.

The book, *Paul Dreifuss*, gives, with an attractive betrayal of

his ardent family affection, a photographically minute account of a holiday trip in the winter of 1881 and 1882; one of several he made to Europe to prevent a complete breakdown of his health in consequence of his constantly overdoing his strength. The trips were for rest, literally recreation, and he generally spent each time only about two or three weeks on the other side; for instance, in 1874 (July 13–September 2), 1876, 1878, 1880, 1882, 1884, 1887 and 1888. The book was published as the work of John W. Allen, Jr.; but many years afterwards was attributed to Mr. Lesley in two or three biographical dictionaries, evidently on authority from him or his family. Indeed, the very handwriting of the name on the cover is his, and every chapter, yes, every page, contains ample proof of his authorship. The book is really a chapter of his autobiography, for he is not only the author, Allen, but the hero, Paul, a pseudonym of the second degree. The author's name given on the title-page may, perhaps, be that of a grandfather; for his mother's name was Allen. Dreifuss was, perhaps, suggested by the tripod he had so much used in surveying; and Paul perhaps, by his own name of Peter. Such a double veil over his identity, adopted for no apparent reason beyond a natural love of privacy, must have much diminished the sale of the book, and has prevented it from becoming known even to many relatives and friends who would have enjoyed it, not merely for its public value and interest, but for the entertainment and instruction to be had from ample and easy reading between the lines. The book not only describes minutely his own doings and philosophical and witty reflections during a short trip to Europe, but recalls many of his earlier experiences in Europe and elsewhere, particularly his European journey of 1863.

In 1884 he served as President of the American Association for the Advancement of Science, at the great Philadelphia meeting; and in 1885 made the retiring presidential address at the Ann Arbor meeting. The address was devoted chiefly to setting forth, with good judgment and graceful wit, views of general importance, as a scientific man of long experience: on the noble, unselfish character of the true, but rare, philosopher, or superior man of science; on the dangers of too great accumulations of mere undigested, unorganized scientific facts; on the risk of smothering wisdom, the spirit of science, with its letter, inordinate learning; on the utility of science to the world; on the need to diffuse, not so much knowledge, as the skill to discover it; on the excessive frequency of forward tyros who imagine they have that skill; and on the manifold advantages of "dead work" in science, or the drudging,

tedious collection and thorough digestion of the elementary facts of investigations, its absolute necessity to investigators, teachers and professional experts, the invigorating mental effect of its habitual performance, and its reposeful, refreshing effect on the tired brain. He spoke of this from ample experience; for he himself had patiently waded through such labor in vast quantity, with unflagging steadiness, in addition to his higher, more conspicuous work. He could, in fact, often have called himself, as Johnson in his dictionary defined the lexicographer, "a harmless drudge," and with still greater reason.

He interested himself greatly in the improvement of the apparatus and methods of surveying, chiefly to lessen its drudgery, so far as possible. About 1854* the Pennsylvania Railroad, under his guidance, made a very accurate railroad odometer, and measured the whole line from Philadelphia to Pittsburgh, fixing the mile-posts anew. He also used an improved odometer in surveying, and proved its superiority to chaining, both in convenience and exactness, even off the roads, on rough ground. This odometer was in use in 1855 and 1856. Some odometers, too, were made for use on his State Geological Survey. The aneroid was another instrument to the improvement of which he gave much attention. About 1857 he devised one that was made for him by the skilful Becker, and was in successful use for many years. It had twelve vacuum-boxes and a dial plate 14 in. in circumference, corresponding to only 2 in. of the mercurial column, or about 2,000 ft. of height; and was well compensated and light. In 1862 he experimented a little with stadia measurement, and was convinced of its advantages; but encouraged a young assistant to elaborate the method further within the next two or three years. A highly convenient micrometric pair of dividers for plotting field-notes was an invention of Mr. Lesley's in 1868, and was described by him in a paper read before the Philosophical Society in April, 1873, and republished in the *R.R. Register*, June 28, 1873. It was so published in order to save his fellow topographers from any risk of having to pay a royalty to anybody else, though he did not desire a patent upon it himself.

In 1886, busy as he was, he with great good humor consented to deliver the Commencement-day oration at Smith College, Northampton, Mass.; and it proved to be highly acceptable.

Mr. Lesley was not only an Honorary Member of the American Institute of Mining Engineers (1890), and corporate member

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* *U.S. R.R. and Mg. Register*, September 4, 1869.

of the National Academy of Science, and Fellow of the American Association for the Advancement of Science, as already intimated; but he was a member of the Academy of Natural Sciences of Philadelphia; of the Boston Natural History Society; the American Oriental Society; the Oriental Club of Philadelphia; Foreign Honorary Member of the American Academy of Arts and Sciences; Foreign Member, Geological Society of London; Associate Member, Société Géologique du Nord; Member of the Moscow Imperial Society of Naturalists; the Emden and Neufchâtel Academies of Science; and the Lille Academy of Natural Science. In 1878 the degree of LL.D. was given him by Trinity College, Dublin.

During the seventies, eighties and nineties, he was conscious that some special care should be taken of his health, but imagined that he was doing all that was needful in the way of exercise if he walked every evening half a mile to the Union League clubhouse and back, and played billiards there for an hour or two; which would clearly have been an insignificant amount of exercise for a man who had not a constitution naturally so unusually vigorous as his. It is not surprising, then, that with his excessive industry he should have quite broken down in 1893; on the contrary, it is astonishing that he should have held out so long. At length, in the summer of 1896, when the last volume of the reports and atlases had been published, and his health had not been recovered, and he could do no work whatever, it was decided to give up his home in Philadelphia and stay permanently at Milton, Mass., where he had for some years spent the summer, the village of his pastorate nearly fifty years before, and the home of some of his wife's relatives. His brain was affected much as it had been in 1866, but his increased age now made it impossible, as it proved, to restore it even with a few years' rest; and though serious work was wholly given up, he gradually failed still further. In other respects, however, his health was generally not such as to cause discomfort, yet with occasional ill-turns. He had every needful care and fond attention, and was in the main comfortable. He passed the time mostly in listening to reading aloud, which had been his favorite recreation for a portion of each day for many years. He himself was a delightful reader-aloud; but now he preferred listening. The reading was mostly light, the best novels; but as late as the autumn of 1901, he was listening to Curtius's *History of Greece*, and making excellent comments upon it. It might, however, be said that he was continually failing, in fact, slowly dying for eight years or more. Finally, on the morning of

June 1, 1903, he had a sudden stroke of apoplexy, and he continued unconscious until his last breath, at about eleven o'clock in the evening of the same day. His funeral took place on June 4th, and, in accordance with his own desire, his remains were cremated. He was in his eighty-fourth year, and had outlived his sister and all his brothers; but his wife, two daughters (Mrs. Charles W. Ames, of St. Paul, Minn., and Mrs. Henry K. Bush-Brown, of Newburgh, N. Y.) and ten grandchildren survive him. With his wonderful power, vigor, activity, brilliancy and kindliness, he had attained in extraordinary measure "the five blessings" of the Far East: long life, prosperity, honors, love of virtue, and a peaceful end. What is more than all that, the well-merited new life he has begun to live in these descendants surely equals, if not exceeds, any anticipations or hopes he could have entertained.

APPENDIX E

A BIOGRAPHICAL NOTICE OF J. PETER LESLEY *

BY HENRY M. CHANCE

(*Read April* 6, 1906)

In the year 1856 upon the thirteenth day of July, J. Peter Lesley was elected to membership in the American Philosophical Society. Although he had then lived not quite thirty-seven years, he was already widely known as a geologist of marked ability, as a man of parts, and as one likely to become a valuable member of this organization. This hope was almost immediately realized, for the new member at once became one of its active workers, and soon, by reason of his ability and vigorous personality, recognized as one of its leading spirits. That in according him leadership his fellow-members judged wisely and well, and that the confidence reposed in him was abundantly justified the records of this society bear ample testimony; and we who now do homage to his memory do know that so long as the American Philosophical Society shall have being, the memory of the life and work of J. Peter Lesley will be cherished as one who contributed largely to its welfare and added to the dignity and strength of its purposes and influence.

He was by divine right a leader of men, a nobleman, intellectually a giant. As a man among men he was of charming personality, generous to a fault, a tireless worker, energetic, practical, resourceful, yet withal a philosopher, student and profound thinker, one to whom no personal exertion was too great, who considered other men's mountains as mere molehills, too small to cause the hesitation of a moment, but to be surmounted quickly that the pleasant valley of scientific truth lying beyond might surely be reached; yet a man considerate and forbearing to others. One we must place among the great and grand historic characters.

In 1859 he became librarian and secretary to this society, the

* Reprinted from Proceedings American Philosophical Society, vol. xlv., 1906.

duties of which office he performed until 1885, a period of twenty-six years. In 1887 he became one of its vice-presidents, continuing in this office for ten years, when failing health compelled him to retire from active participation in the affairs of the society.

Those to whom he was personally known, will always remember how earnestly, efficiently and tirelessly he labored for this society "for promoting useful knowledge," how dear to him were its traditions and purposes, and how faithfully he performed his official duties to it.

The promotion of useful knowledge was with him an absorbing passion. He loved to impart to others what he knew, seeking knowledge that he might give it to others. He had the inborn love of the teacher. It was his life to him to learn that others might learn and thus profit through him. He was no miser of his great wealth of knowledge, but spent it prodigally that there might be some for all, yet was he not denuded of it, but enriched in the giving. Yet was he neither haughty nor austere nor proud. He was ever an attentive listener, always eager to grasp some new fact, willing to ignore or disregard mere authority, if thereby he might seize upon something new, something valuable, something useful to his fellowmen. And even when after years of successful work he became one of the foremost living geologists, he was still ready to listen thoughtfully and appreciatively to the laborer, miner or artisan, hoping thereby to learn something that might have escaped his own observation.

One may perhaps best comprehend the passion for science, for research and for scientific truth that seemed to pervade his every thought and to govern his every act by reviewing what he was to this society, what he did for it, and the underlying cause of his great love for it, doubtless to be found in the title of the society "for promoting useful knowledge," for his whole professional life was consecrated to this purpose and to a society pledged to this end his allegiance naturally was given.

For several years he was professor of geology and mining at the University of Pennsylvania, where as a student in the year 1872 the writer first came to know, in common with all those who studied under him, his gentle and kindly personality and his conception of the value of knowledge. And doubtless many of his former students can recall how urgently he begged them to acquire knowledge, not from books only, but to go into the highways and byways, into the workshops and factories, and glean that which was useful and valuable; how repeatedly he taught that from the most ignorant something of value might always be learned, and how

eager he was to impress upon all their duty to publish to the world every new or valuable fact which they might possess, that others might benefit thereby. Thus, in other channels than those of this society, he was striving not only to "promote useful knowledge," but to imbue others with like impulses, and one cannot doubt that the influence of his life and precepts upon hundreds of students has given force and impetus to the dissemination of knowledge. He seemed to delight in teaching because it afforded him this opportunity of inspiring the young with a thirst for knowledge, of directing them how to find it and of imbuing them with a sense of their obligations to give it freely to their fellowmen. Hence it is not surprising that after this society, which always held the first place in his heart, he seemed to love next best his work at the University of Pennsylvania where for nearly twenty-five years he was a member of the faculty.

While it was as a student at the University of Pennsylvania that the writer first met and learned to admire and respect him, the acquaintance thus begun continued through a closer association of ten years (1874–84) as one of his assistants, during a portion of the period in which Professor Lesley was state geologist of Pennsylvania.

As state geologist, his attention was absorbed to the exclusion of almost everything else, by a great task to be performed, by a great duty to the state to be faithfully discharged, and to this end he bent every effort, working prodigiously, doing the work of others, never sparing himself, always laboring, always earnest, never satisfied to take the rest or recreation most men deem indispensable. Yet he was ever considerate of others, never expecting them to strive as he did, but on the contrary continually taking from all of his assistants some of their burdens and carrying them himself.

Only an overwhelming sense of duty, of responsibility assumed to be conscientiously discharged, and great love for the work could have enabled him to labor as he did during these last ten years.

At all other periods of his life he was a prolific writer and industrious worker, but prior to 1874 his activity was greatly diversified, his record for these years comprising many expert geological reports, editorials for the *United States Railroad and Mining Register* discussing current topics of general interest, and many scientific articles, philological, ethnological, palæontological, mineralogical, together with the discharge of his duties as editor and proof-reader of this society's publications. To few is given the

ability to work so indefatigably, and few indeed so completely surrender the pleasures of life to labor. To the concentration of all his energies upon this last great task for the State of Pennsylvania can be attributed the failure of his health and strength some ten years prior to his decease.

His relations to his fellowmen were marked by a wonderful kindliness, a childlike and sympathetic interest in others, an unrestricted generosity, and thoughtlessness or even carelessness regarding matters affecting his own welfare and comfort. Rarely in one man are found so many lovable traits, and no written word of mine adequately can portray his character as man, as scientist and as engineer.

As a man he embodied and radiated those emulable qualities found in the courteous, kindly, genial Christian gentleman; as a scientist he was infused with a devotion to science, an overpowering love of truth, a passion for knowledge, and a delight in research; as an engineer his ability was early demonstrated in that inventive faculty which enabled him to devise new and improved methods, and by that unbiassed, even judicial quality which permitted him to draw his materials from all sources and utilize them to the practical benefit of his colleagues.

In temperament he was strongly poetic and artistic, often thinking, reasoning and talking as a poet and seeing as an artist; embellishing with poetic imagery the vigorous originality of his writings and accentuating with artistic touches the individuality which marks the maps and sketches with which he profusely illustrated his reports and many of his scientific papers.

Intensely interested in abstract science, loving it for itself alone, always alert to the discovery of every new fact, to the evolution of a new law or theory, speculating as a poet and artist upon the possibilities opened up to human advancement by such discoveries, dreamily looking back through the ages, reconstructing mentally the conditions and forces at work, which have given us the earth as we now have it, and perhaps looking forward striving to foretell the future,—yet withal he was eminently practical, a man of affairs, an engineer.

In a moment, divorcing these poetic dreams, he became a utilitarian, a conservative mining engineer, accepting and weighing only those facts and agencies having direct bearing upon the extent, quality and value of the minerals with which as a master of the art he continually had to deal.

As his abilities became known and recognized by men of affairs as fitting to render them valuable advisory services, he was re-

tained to investigate and report upon mineral lands in many localities. Some of these private reports are classic productions, now used as models by professional geologists and engineers.

This society was indirectly interested in this phase of his life's work, for it was mainly through income derived from his private practice that he was enabled year after year to give the time necessary to its service. It is practically impossible to enumerate in detail the work which stands to his credit here in our books. The files of the society's publications contain hundreds of communications from his pen, and many articles which he assisted the authors to prepare, but to which his name is not appended. As librarian and secretary to this society he was its "editor-in-chief," revising, proof-reading and editing most of its publications during the twenty-six years he held this position.

During this period he was rarely absent from the meetings of the society, frequently joining in the discussion of papers read at the meetings, and when the attendance was small or interest flagged, he would often supply something from his apparently inexhaustible fund of knowledge to entertain and benefit those present, invariably captivating their attention and making his discourse both delightful and instructive. His presence at these meetings was also valued for the many wise suggestions which he made relating to the conduct of its business.

In the practical affairs of life he was keenly alive to the value of modern methods. He was among the first to use the card index for general indexing purposes, he was the originator of stadia measurement surveying in governmental work in this country, he invented a method of shading topographical contour-line maps to get relief effects, and devised several methods of constructing geologic and topographic models, which he regarded as the only satisfactory means of showing the relation between geologic structure and topography. He strenuously urged the construction of such models on equal horizontal and vertical scales, deprecating the then common practice of exaggerating the vertical scale.

Possibly his success in life was in a measure due to the courageous, fearless expression of his opinions and convictions that marked his advocacy of any cause, and to that equipoise which enabled him to listen patiently and considerately to those who might differ with him, although he seemed at the outset intuitively to master any subject, be it never so complex, and at a glance to grasp the whole range of possible combinations, deductions and interpretations, just as a great general will with a single sweep of the eye pick out the strategic points on a field of battle.

He was naturally a scholar in the broadest sense of the word, for aside from his passion for science, and pleasure in work, he loved learning, taking delight in academic studies and spending all of the time he could take from his work in the material sciences, in these pursuits. He had marked ability as a linguist and aptitude for the study of languages, and would have attained eminence as a philologist or egyptologist, had not his bent been more toward the natural sciences and his time so occupied with geologic work that he was unable to pursue these studies except, as he said, "as a recreation" and "to rest an overworked brain."

We cannot hope to record here anything approaching a biography such as his achievements justly merit and must rest content to briefly summarize the major works of his life with such dates and facts as the writer has been able to verify.

Professor Lesley was born in Philadelphia on the seventeenth day of September in the year 1819. His father was Peter Lesley, and his grandfather also was Peter Lesley, and both were cabinet makers. The son was also named Peter Lesley, but disliking the form Peter Lesley, Jr., at an early age he began writing it J. P. Lesley (Junior Peter Lesley), and this form he retained throughout life, although at times in his official capacities he was designated as Peter Lesley (which the writer understood him personally to say he regarded as his legal name), and in earlier years he occasionally wrote it J. Peter Lesley and also Peter Lesley, Jr.

He graduated at the University of Pennsylvania in 1838 — he was then not quite nineteen years old — and the next year obtained an appointment as assistant on the Geological Survey of Pennsylvania under Professor Henry D. Rogers, who assigned him to duty at Pottsville with James S. Whelpley, a young assistant who had great ability as a topographical geologist. Whelpley shortly left the survey, and Lesley continued the work that and the succeeding year in that region, and later in the bituminous coal-fields of Somerset and Fayette counties, and in 1841 did additional work in the region of the Allegheny River and its tributaries.

In 1841 he entered Princeton Theological Seminary where he completed the course three years later and was licensed by the Philadelphia Presbytery. During these years his vacations were spent in constructing a geological map of Pennsylvania and in drawing many illustrations for Rogers' final report.

In 1844 he went to England and from there tramped through France and Switzerland, returning the following year to Philadelphia.

After serving for two seasons as a distributor of Presbyterian

tracts for the American Tract Society, he went to Boston to assist Professor Rogers in redrawing the Pennsylvania maps and illustrations for the final report.

In 1848 he became the pastor of the Congregationalist Church at Milton, Massachusetts, and soon after married Miss Susan Inches Lyman (February 13, 1849) at Northampton, Massachusetts.*

He was fortunate in securing as his partner for life one whom nature had richly endowed with intellectual gifts of an order similar yet complementary to his own. Her ability as a writer of delightful domestic sketches and reminiscences enabled her to appreciate and enter into the spirit of his aspirations, while the unruffled serenity with which she confronted the storms of life was reassuring to his more nervous temperament, soothing and allaying his fears and encouraging him to wait patiently for the fair weather sure to follow.

In 1849 he became a member of the American Association for the Advancement of Science. In 1851 he resigned his pastorate at Milton to resume geological work with Professor Rogers.

From 1853 to 1856 he was engaged in private and corporation surveys in Pennsylvania, and in the latter year published his first book, "Manual of Coal and its Topography," a small volume of 224 pages, finely illustrated by the author; now a very rare book and in great demand by geologists. That he believed this book conveyed a message of value which would add to his prestige and bring clients to his office is frankly stated in the first sentence of the preface, beginning, "The author has planted this sapling for the future shade and ornament of his own office, but trusts that it may prove useful also, and perhaps agreeable to the public highway."

He was elected secretary of the American Iron Association in 1856, during the next two years was engaged in compiling statistics of the iron trade in the United States, and in 1859 prepared and edited for the association an octavo volume of eight hundred pages entitled "The Iron Manufacturers' Guide," which for many years was a standard reference book.

In January, 1858, he was elected librarian of the American Philosophical Society, and the next year became one of its four

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*While Mrs. Lesley was still living at the time of his death, she survived him but six months, passing away January 16th, 1904. She was of charming disposition, charitable and kindly, devoted to her husband and children and always deeply interested in his work and plans, and to her affectionate care and assistance must be credited his ability to turn out such enormous quantities of work well done.

secretaries, which dual office he held until his resignation in 1884. He was elected vice-president in 1887, continuing in that office until 1897.

In 1859 he was elected professor of mining at the University of Pennsylvania, in 1872 was made professor of geology and mining, and in 1886 professor emeritus of that chair. During his active work at the university he was for some years dean of the Towne Scientific School.

In 1869 he became editor of the *United States Railroad and Mining Register*, retaining this position until 1873, during which period he contributed to it a large number of editorials, embracing political as well as technical essays and discussions.

From 1858 to 1874 he was largely engaged in geological work for corporations and private individuals, which was in fact his chief source of income, and without which he would have been unable to attend to the affairs of this society.

In the early sixties he overworked himself in private geological surveys in the oil fields, and in 1866 was compelled to go abroad and spend two years in regaining his health and strength.

In 1874 the commissioners of The Second Geological Survey appointed by Governor Hartranft to inaugurate a thorough resurvey of the state elected him state geologist. Putting aside a growing and lucrative professional practice, he devoted his whole time and energies to the supervision of the field forces and to the revision and editing of the reports of progress, comprising more than one hundred octavo volumes, and finally to the personal preparation of a final summary report.

The passage of the law inaugurating the Second Geological Survey of Pennsylvania was in response to a demand for accurate knowledge of our mineral resources, arising from the expansion of manufactures following the Civil War. At that time few of the states were prosecuting such surveys, and those so engaged were hampered by lack of funds and scarcity of specialists trained to the work. No established mode of conducting such surveys had been formulated, nor had any system been devised for a prompt publication of the results.

As organizer of this survey, Professor Lesley was thus confronted with problems upon a satisfactory solution of which the future of the survey surely would depend, for the appropriation made by the legislature was sufficient to cover two or three years at most, and unless the people were satisfied with the results there could be little, if any, hope of further appropriations. From the inception of the work it therefore was essential that reports be

made and published each year, that these reports consist of great accumulations of facts describing the occurrence of ores, oils, coals and other valuable deposits in a form useful to the practical miner, and that the deduction of general laws, correlation of geological names, elaboration of geological structure, investigations of deposits of obscure origin and palæontological studies all must be deferred until the survey had been in progress for several years.

To meet these conditions, Professor Lesley devised the system adhered to throughout the life of the survey of publishing the material in "Reports of Progress," each report being an octavo volume usually confined to a certain district or county, that data covering any locality could be obtained from a single volume — now a system of recognized merit and since adopted by other governmental surveys.

In planning the organization and scope of the survey, the board of commissioners extended to him the utmost freedom, conferring upon him power to use his own methods, to select his assistants, to determine what work should and what should not be done, relying upon his judgment and ability to produce the best results at least cost, and standing loyally by him as stanch friends and supporters through all these years.

Almost immediately after his election he appointed as his principal assistants Persifor Frazer, Frederick Prime, Jr., John H. Dewees, Franklin Platt, J. J. Stevenson, John F. Carll and Andrew Sherwood, geologists, and Dr. F. A. Genth and A. S. McCreath, chemists, each being assigned to a certain district or to special duties, and given one or two younger men as aids. With these as a nucleus, he gradually built up, chiefly by promotion from among the younger men, a large and efficient corps of trained workers, to whom he accorded the greatest latitude, encouraging them to originate, to devise new methods and theories, holding them responsible only that their work be well and accurately done. Probably no public organization was ever less bound by the red-tape of officialism than this survey corps, whose members he left untrammelled, unhampered, trusting each to do his duty, thus placing each in a position where he was driven to do his best, where he would be ashamed to do less.

He assumed the editing and proof-reading of nearly every report, generally contributing a preface discussing matters of most striking interest and disputed questions of geological nomenclature or theory. These prefaces are clear, concise expositions of the subjects with which they deal, so plainly written that the layman may read and understand, yet often defining the nicest

possible distinction between opposing theories, ably and subtly reasoning for both sides — models of terse, forceful English.

Throughout this great task he never seemed to think of fame or honor to be won through it for himself, invariably giving credit to each assistant for the whole of his work, and reserving none for himself. In thus recalling his unselfishness, we are unavoidably reminded of the entire absence of anything like envy in his disposition. He never seemed conscious of professional jealousy, being utterly incapable of it himself and failing to realize the possibility of it in others. In this he towered far above the mass of his fellow scientists, with few indeed of equal stature. It was characteristic of the man to ignore as trivial the use of his work by others without proper acknowledgment, although he was himself scrupulously particular never to offend others in this way.

In devising necessary modifications of geological nomenclature, he was most careful to adopt from names already used by other geologists those appropriate and in common use, hesitating and generally declining to formulate any system which would destroy or obscure the work of others.

While thus cautiously avoiding trespassing upon others and ignoring trespass upon his own domain, he was severe in denouncing charlatanism and scientific inaccuracy (which latter he regarded as an almost equal sin, and one of which he was most impatient), yet he was never bitter or vindictive, and when attacked by misrepresentation or captious criticisms seemed to feel it beneath his dignity and a waste of time to reply.

Though the efforts of the board of commissioners, appropriation after appropriation was secured for the continuance of the survey, but without resort to political influence or the methods of the lobbyist. He detested any appearance even of lobbying, holding that the survey should stand or fall upon its merits as appraised by the citizens of the state.

Never during the continuance of the survey were funds available sufficient for a complete geological and topographical survey, and he was obliged to use the more or less inaccurate county maps as the base upon which to lay down geological coloring and structure. This he greatly deplored, constantly grieving that he could not construct accurate maps and continually urging the inauguration of a topographical survey of the state. This latter object he never attained, but in one district he was able to construct maps more to his liking. This was in the anthracite coal-field where, through co-operation of the land and coal companies, the framework for an accurate mapping of the district became available,

and there he developed the style of mapping he hoped to see extended to cover the whole state. This work was entrusted to Mr. Charles A. Ashburner, a talented young assistant (a member of this society, since deceased), who retired from the survey prior to its completion, but not before he had ably planned to realize Professor Lesley's high ideals of accuracy and geological completeness, and now after twenty years the anthracite mine sheets of this survey are unapproached, unrivalled, in beauty, accuracy and practical utility by any governmental survey publications, standing as present-day models of artistic, accurate geological mapping.

Through all these years he sacrificed much to the people of Pennsylvania, relinquishing the fees of a large professional practice, surrendering his compensation at the University of Pennsylvania, and even delegating to others many functions dear to his heart in this society, all that he might better serve his fellow citizens, set higher standards for geological work and prove its value in the practical development of his country.

At the last, he undertook the preparation of a "Final Summary Report," a digest of the numerous Reports of Progress. This herculean task was assumed at a period when nature was calling upon him to rest, but disregarding all warnings he set himself at it, determined that it should be done. Over 1,800 octavo pages tell us how well that work was done. It sets a standard for governmental reports. Nowhere can be found a more lucid exposition of facts and principles, unmarred by the assertion of personal theories, unbiassed, thorough and complete. In the introductory chapters of the first volume, including especially the essay on "Geological Time," better perhaps than anywhere else we find the impress of his sign-manual; here are arguments, conceived and developed in a brain accustomed to exact scientific analysis, recorded with the clearness and simplicity of one writing for children, yet with the logic of a master in debate; the product of genius beyond praise.

But this great task he was not permitted to finish; his strength was insufficient, and after publishing two volumes and preparing a portion of the third and final volume (embracing in all over 1,800 octavo pages), he reluctantly delegated to others the writing of the final chapters.

In 1896, in failing health, he removed to Milton, Massachusetts, where he lived until his death in 1903.

In addition to his membership in this society he was a corporate member of the National Academy of Sciences, Fellow of the Amer-

ican Association for the Advancement of Science of which he was the President in 1884, member of the Boston Natural History Society, of the American Oriental Society, of the Academy of Natural Sciences of Philadelphia, of the Oriental Club of Philadelphia, foreign member of the Geological Society of London, associate member of the Société Géologique du Nord, member of the Moscow Imperial Society of Naturalists, the Emden and Neufchâtel Academies of Science, the Lille Academy of Natural Science, Foreign Honorary member of the American Academy of Arts and Sciences, member of the Union League Club of Philadelphia, and honorary member of the American Institute of Mining Engineers.

The degree of LL.D. was conferred upon him in 1878 by Trinity College, Dublin.

Aside from his work as state geologist of Pennsylvania, his most valuable contribution to the world of science was the discovery and enunciation of the principles governing the relation of structural geology to topography. He was the father of the science of topographic geology, to which he early directed attention by illustrations prepared for the reports of the First Geological Survey of Pennsylvania of which Henry D. Rogers was the author, and by further elaboration of the subject in 1856 in his "Manual of Coal and its Topography," wherein the relation of structural geology to topography was first clearly set forth, and a new method put into the hands of every field geologist whereby many difficult problems of structure may be solved by a mere inspection of the contour of the surface.

And now that he has passed away, as we review his record and ponder its messages, the thought that comes pregnant with the very essence of his life, is that he was a good man, who lived a goodly life, leaving to posterity the fruits of a most honorable career, a career marked by a beautiful devotion to duty extending through a long life well spent in the service of humanity. He helped to make the world better than he found it, striving ever after the realization of the most beneficent ideals, always aiming high, ever looking upward, exalting and ennobling those within the sphere of his influence and inspiring them to reach out after that which is noblest and best in life; through these he still lives, and through them the impress of his character to the benefit of humanity will descend from generation to generation and from generation to generation forever.

APPENDIX F

MEMOIR OF J. PETER LESLEY

BY JOHN J. STEVENSON

(From *Bulletin of the Geological Society of America*, vol. 15, 190.)

J. Peter Lesley, born in Philadelphia September 17, 1819, died in Milton, Massachusetts, June 1, 1903.

His youth was spent in Philadelphia, and in 1838 he was graduated at the University of Pennsylvania. Professor Henry D. Rogers at once appointed him an aid on the Pennsylvania Geological Survey, and in the following spring assigned him to assist Mr. Henderson in the anthracite area; but within a few weeks Mr. Henderson was transferred to another district, and Lesley was left alone to collect systematic information from the collieries and to instruct himself in field work. In 1840 he made a topographic and geologic sketch map of the complicated Siluro-Devonian area between Harrisburg and the New York line, and afterward, as assistant to James T. Hodge, studied the Carboniferous of Somerset and adjacent counties, confining his attention to the coal beds, while Mr. Hodge studied the iron ores. During this season he identified with the Pittsburg the great coal bed at Salisbury, in Somerset county. In 1841, the last year of the survey, he made a reconnaissance of the northern and northwestern part of the state, studying the fourth and fifth bituminous coal basins as far south as Kittanning, on the Allegheny river, and rounded out the year's work by a new study of the anthracite region, completing the map left unfinished by Whelpley when he resigned, in 1839. During 1840 and 1841 Lesley worked out the detailed and generalized sections of the lower productive and lower barren measures now known as the Allegheny and Conemaugh formations — all this before reaching his twenty-second birthday. His studies were made when much of the country was still a forest-covered wilderness, when roads were few, when aneroid barometers and pocket levels were unknown, and ordinary intervals were measured by estimate. His work in Somerset and the adjacent area was

mere reconnaissance, yet his work, closely reviewed by geologists of the second survey, needed little more of correction than did that of certainly one member of the second survey made in parts of that region thirty-five years later and under more favorable conditions. The skill with which Lesley and his youthful colleagues unravelled complicated structure was little short of divination.

The survey ended somewhat abruptly with the season of 1841 — the geologists were scattered — but Professor Rogers began to prepare his final report, hoping that the state might be induced to publish it. Lesley had entered Princeton Theological Seminary to "indulge in a course of theology," but his skill as topographer and draughtsman, his knowledge of structure in all parts of the state, above all, his integrity and loyalty, made him indispensable to Rogers, so that all of the time, not imperatively required for study, was employed in preparing maps and diagrams for the final report. At that time the only map of the state was so inaccurate as to be undeserving of its name. There were numerous county maps, some of which had been colored and in some measure corrected by members of the corps; Lesley had made many corrections wherever he went, and there were a few detached areas which had been surveyed carefully. Such material as existed was given to Lesley that he might construct the map. He has described the process, how the county lines were forced into adjustment from both ends of the state to the Susquehanna river, where the total error accumulated; this gross error was distributed backward east and west over the whole state "so that the fundamental skeleton of the map was 'tempered' like a pianoforte, being erroneous throughout, but with the local errors reduced to a minimum." On this county line scheme he plotted the topography, "good, bad, and indifferent," and laid down the foundation colors. This done, he constructed thirteen cross-sections and drew to a scale several hundreds of local sections, diagrams, and sketches, the whole work occupying eighteen months of 1842 and 1843.

Having completed his theological course, Lesley was licensed to preach by the Presbytery of Philadelphia in 1844, and at once went to Europe, where he made a pedestrian tour through France and Germany, which he closed with a brief course of study at the University of Halle. Returning to America, he undertook colportage work in northern Pennsylvania for the American Tract Society, which he pursued with characteristic energy and success for two years. In December, 1847, Professor Rogers asked him to come to Boston, where for five months he was busy in preparing duplicate copies of the geological map and sections, which were

to be placed in the state capitol at Harrisburg. While in Boston he received and accepted a call to the pastorate of the Congregational church at Milton, Massachusetts, where he remained until 1851. In this interval his views respecting some theological matters developed along lines not wholly acceptable to his ministerial associates, so that at the end of four years he resigned his charge, abandoned the ministry, and returned to Philadelphia where he began to practice as consulting geologist. At once his services were sought again by Professor Rogers, who had obtained an appropriation for preparation of the final report, and for more than a year he was engaged upon the revision work.

Thenceforward for forty years his labor was incessant. He was recognized at once as the most competent of geological experts, and his time was fully retained. Yet from 1855 to 1859 he was secretary of the American Iron Association, for which he published in 1859 a huge volume, the "American Iron Manufacturers' Guide," a remarkable compendium of theory, practice, and statistics, which even now is of much value. From 1858 to 1885 he was secretary and librarian of the American Philosophical Society, rarely absent from its meetings and seldom failing to present a paper or to take part in the discussions. He made elaborate surveys of the Cape Breton coal field, of the Pennsylvania coke region, of the Broad Top area, of the Cumberland Valley iron ores, and of many other areas outside of his own state, and besides found abundance of time in which to learn several languages and to prosecute special studies in several departments of literature and philosophy. In 1872 he was made professor of geology and dean of the faculty of science in the University of Pennsylvania, but in 1878, owing to the pressure of other duties, he resigned the deanship. The Second Geological Survey of Pennsylvania was authorized in 1874, and he was placed in charge of the work, which he conducted until compelled by failing health to relinquish it, in 1895. He was an original member of the National Academy of Sciences and was president of the American Association for Advancement of Science in 1884.

Professor Lesley's first important publication was the little volume entitled "Coal and its Topography," which appeared in 1856. Professor Rogers, after completing the field work necessary for preparation of his final report, had gone to Edinburgh to supervise the publication. By some means, early in 1856, Lesley learned that in this report the geologists who had done the field work, who had solved the problems of geology and topography, and had made some of the most important generalizations were to

be ignored. The information was not quite exact, for when the report appeared a list of those who had been connected with the survey was given in the preface, so that one may not say that they were wholly ignored. Spurred by indignation, Lesley wrote the book to preserve for his colleagues at least a share of the credit which was their due. The work was done amid the cares of a great practice, much of it at night after fatiguing days at the office, yet in six weeks the manuscript was ready for the press. The book served the purpose; as it were, incidentally it defined the area and work of the several geologists, but it was more important than its author intended or supposed. There one finds the first systematic grouping of the Appalachian coal beds and the first attempt at genuine correlation with beds elsewhere. The general description of coal and coal beds, as well as of the condition of their occurrence, is still unexcelled, while the discussion of topography in the second part remains, even in the light of present knowledge, one of the most brilliant contributions to physical geography, anticipating, not in germ, but in full, much of what is termed the modern method.

A work of wholly different type is "Man's Origin and Destiny," the Lowell lectures for 1865–66, which appeared in 1868. The subjects range from signification of the sciences through the antiquity, dignity, and social life of mankind to origin of architecture, growth of the alphabet, types of religious worship, and, finally, to what he terms arkite symbolism. When one considers that these lectures were prepared away from home and without access to books, he must admire the industry which had gathered so great a mass of knowledge, the memory which could retain it, and the mind so systematic as to make it readily available. Much of the work, it is true, is no longer important, as many of the conclusions were based on current, but erroneous, interpretation of oriental documents, yet students familiar with the results of recent investigations cannot fail to find much of value in the author's method. If some of the parallelisms appear absurd to-day, the reader should remember that they were legitimate according to the philological methods of forty years ago; it is quite possible that the parallelisms of to-day may appear equally absurd forty years hence. In any event one cannot fail to recognize the skill and ingenuity displayed in the chapters on the alphabet and on arkite symbolism, in which a great superstructure rises on the words "bar" and "ark," this petty foundation seeming to expand as the work proceeds, until at length the whole superstructure appears to rest secure.

Professor Lesley's great work was performed as director of the Second Geological Survey of Pennsylvania. He was head rather than director. An assistant once appointed was left practically to his own devices; but there was something about the personality of the director that impelled each one to do faithful work, that made the unambitious man ambitious. When the second survey was authorized, the conditions were much the same as when Rogers undertook the first survey. There were few trained geologists in the country, and most of those were connected with one or the other of the United States surveys. Professor Lesley had to begin with young men, of whom only three or four had had any experience whatever in field work. He dealt with them generously, considerately, and, remembering his own early work, held them in all confidence. At times, indeed, he forgot that they were not men of broad experience, and his criticisms were none too mild. At others, unstrung by continuous application, he misunderstood the text of a report or misinterpreted a letter, and relieved himself in a communication which was a model of terseness and clearness, and which usually provoked a rejoinder approximately clear and terse. But such misunderstandings were of brief duration; breaches were healed quickly by his whole-souled reparation, and temporary ruptures served in the end to knit him and the assistants more closely than before.

Yet in one direction Professor Lesley never could forget during the early years of the survey that his assistants were inexperienced, and his constant anxiety was to prevent that lack of experience from doing injury either to them or to the state. In those days the time of proof-reading was often a time of perplexity to authors of reports, who frequently discovered parenthetical comments or argumentative foot-notes which were not in every case edifying. Lesley had reconnoitred most of the state during the first survey, and in after years he had made detailed studies in many disconnected portions, especially in the coal, oil, and iron areas, so that he had well-defined opinions respecting almost all localities. When assistants arrived at conclusions contrary to his own, he felt compelled to present what he believed to be the more accurate conceptions.

The results of the work in each district were summarized in prefaces to the several reports. The necessity for such summaries increased with the number of volumes, for the districts were studied independently, and no report was bound closely to those by other observers in neighboring districts. These prefaces were steps toward a final report, enabling students to utilize quickly the work

done in an extended area showing the same general phenomena. The labor involved in preparing them was very great; the manuscript of each report was read with the utmost care; the accompanying maps were studied with equal care, and not a few of them were redrawn by Lesley himself, who prepared also many of the elaborate indices — all this, that he make himself thoroughly familiar with the details.

How well he succeeded is shown by the final report, which, unfortunately, he could not complete. He had finished the story to the end of the Lower Carboniferous, when his health gave way, and the rest of the work was prepared by others. In this report he summarized every volume; he gives full credit to each member of his staff, while important phenomena, observed by the assistants, receive full discussion from the standpoints of his broad reading and his own field work. There is no attempt to evade anything, no inclination to undervalue the work of those disagreeing with him, on the contrary, there is a frank presentation of opposing views and frequently a retraction of opinions long held very dear by him. The more than one hundred and twenty volumes of survey reports are his monument.

Professor Lesley's power of endurance was almost equal to his industry; indeed, for many years his capacity for work seemed to be unlimited; but in the later sixties, during the early expansion of the oil industry of Pennsylvania, the limit was reached and his health collapsed. Recovery was very slow, but complete; thereafter he lived strictly by rule. During the years 1874 to 1891, the active years of the second survey, he closed his office promptly at 4 o'clock, giving six hours of concentrated labor daily. But the preparation of the final report required haste, and his day knew no measure, with the result that in 1893 his life as a student ended without warning. He was able to supervise matters for almost two years longer, and then, the work having been completed, he retired to Milton, Massachusetts, where the remaining years of his life were spent in comfort amid scenes which had always been dear to him.

Throughout Professor Lesley sought only to do to others as he would have them do to him. If at times in a discussion he aimed directly at the weak places in his adversary's armor and drove his weapon home with his might, all knew that no rancor accompanied the thrust. He was but a champion defending the right, and he always recognized that his adversary was equally honest, though of course on the wrong side. He knew nothing of envy. The world with its rewards was large enough for him and all others be-

sides; but he seemed to feel it a sacred duty to protect those who had gone before, to prevent others from ignoring them, and to secure for them all honor for their work, even though it were imperfect. Ever ready to defend the rights of others, he was indifferent to his own. If another appropriated his work, he appeared to feel no irritation; rather was he inclined to regard the confiscation as evidence that his work had proved to be a genuine contribution to knowledge. He loved to remember the good and to forget the ill done by others with whom he had been in relation. On one occasion the writer endeavored to dissuade him from a contemplated action, assuring him that the person to be benefited was more than unfriendly. The answer came sharply, "Friend once, friend always; that is my motto. If you wish to have a happy old age, you will do well to take it for your own." This was no burst of rhetoric; it was the explanation of his life.

Professor Lesley was the last of the old geologists, the only link binding us to the men of the early years, 1837 to 1841. His life was proof that the tradition respecting the character and ability of those men is true. He was a cheery, winsome companion, an affectionate husband and father, loved and revered in his household, honored by his friends. As was fitting, he passed away without suffering, literally crossing the threshold in sleep. In 1849 he married Susan Inches, daughter of the Honorable Joseph Lyman, of Northampton, Massachusetts, who, with two daughters, survives him.

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A study of the structure and erosion of Brush mountain, Blair county, Pennsylvania. *Ib.*, vol. 12, pp. 503–504, map.

The iron ores of the South mountain along the line of the Harrisburg and Potomac railroad, in Cumberland county, Pennsylvania. *Ib.*, vol. 13, pp. 3–21, map.

Saint Clairsville and Bedford railroad and Dunnings creek fossil ore. *Ib.*, vol. 13, pp. 156–168.

On the iron ore deposits of Buckingham mountain, Bucks county, Pennsylvania. *Ib.*, vol. 13, p. 264.

1875. Notes on the comparative geology of northeastern Ohio, northwestern Pennsylvania, and western New York. *Second Geol. Survey Pennsylvania*, Report I, pp. 57–108, map.

Coal beds in the sub-Carboniferous of Pennsylvania. *Am. Jour. Sci.*, 3d series, vol. 10, pp. 153–154.

1876. The Boyds Hill gas well at Pittsburg. *Second Geol. Survey Pennsylvania*, Report L, pp. 217–237.

Second Geological Survey Pennsylvania, Report A. Historical sketch of geological explorations in Pennsylvania and other states,

with an appendix containing the annual reports of the state geologist to the board of commissioners. Pp. 200, xxvi.

On glacial blocks in West Philadelphia. *Proc. Am. Phil. Soc.*, vol. 14, pp. 644–645.

On the geology of the brown hematite ore banks of Spruce creek, Warriors Mark run, and Half Moon run in Huntingdon and Center counties, Pennsylvania. *Ib.*, vol. 14, pp. 19–83, 102–107, map and 44 figures.

On the structure of southeastern Pennsylvania. *Ib.*, vol. 14, pp. 439–440.

1877. Topographical map of Pennsylvania, colored for the principal geological formations. Frontispiece to Macfarlane's Coal Regions of America.

Oil well records selected from the collections of J. F. Carll, of Pennsylvania. *Proc. Am. Phil. Soc.*, vol. 16, pp. 260–266, 346–380.

1878. On a series of chemical analyses of Siluro-Cambrian limestone beds in Cumberland county, Pennsylvania. *Ib.*, vol. 17, pp. 260–266.

On terrace levels in Pennsylvania. *Am. Jour. Sci.*, 3d series, vol. 16, pp. 68–69.

1879. Notes on a series of analyses of the dolomitic limestone rocks of Cumberland county, Pennsylvania. *Second Geol. Survey Pennsylvania*, Report MM, pp. 311–361.

Note on classification of coals. The same, pp. 144–157.

1880. On fossils in the Peach Bottom roofing slates of Pennsylvania. *Proc. Am. Phil. Soc.*, vol. 18, pp. 365–366.

Sur les limites du terrain carbonifère et du terrain permien en Amérique d'après l'étude de leurs flores. Congrès Internat. de Géologie, Comptes Rendus, session of 1878, pp. 130–135.

Notes on a series of analyses of the dolomitic limestones of Cumberland county, Pennsylvania. *Proc. Am. Phil. Soc.*, vol. 18, pp. 114–120.

On a deep well at Murraysville, Westmoreland county, Pennsylvania. *Ib.*, vol. 18, pp. 207–208.

A Hudson river fossil plant in the roofing slate that is associated with chlorite slate and metamorphic limestone in Maryland, adjoining York and Lancaster counties, Pennsylvania. *Am. Jour. Sci.*, 3d series, vol. 19, pp. 71–72.

1882. Notes on the models of Seven mountains, of Stone mountain fault, and of a part of the middle anthracite field of Pennsylvania. *Proc. Am. Phil. Soc.*, vol. 19, pp. 193–194.

1883. On the glacial erosion and outlets of the Great Lakes. *Ib.*, vol. 20, pp. 95–101.

On the equivalency of the Catskill and Ponent formations. *Ib.*, vol. 20, pp. 673–675.

Note on the progress of the second geological survey of Pennsylvania. *Ib.*, vol. 20, pp. 537–544.

1885. Maps of Adams, Franklin, and Cumberland counties. *Second Geol. Survey Pennsylvania*, Report D 5.

Second geological survey of Pennsylvania, Report T 3. The geology of Huntingdon county, by I. C. White and other assistant geologists, edited by J. P. Lesley, xv, 471 pp., map, plates.

A geological hand atlas of the 67 counties of Pennsylvania, embodying the results of the field work of the survey from 1874–1884. *Second Geol. Survey Pennsylvania*, Report X, pp. cxii, 61 plates.

1886. Annual report of the geological survey of Pennsylvania for 1885. Contains, along with administrative reports, the following papers by Lesley:

The coal beds and fireclays of the Wellersburg basin in Somerset county. Pp. 227–239.

Some general considerations respecting the origin and distribution of the Delaware and Chester kaolin deposits. Pp. 571–591, with map in atlas.

Some general considerations of the pressure quantity, composition, and fuel value of rock gas, or the natural gas of the oil regions of Pennsylvania. Pp. 657–680.

(With E. V. d'Invilliers:) Report on Cornwall ore mines. Pp. 491–570, with map in atlas.

The geology of the Pittsburg coal region. *Trans. Am. Inst. Mining Eng.*, vol. 14, pp. 618–656, plate.

1889. A dictionary of the fossils of Pennsylvania and neighboring states, named in reports and catalogues of the survey. Three volumes, pp. xiv, 1283, with appendices, xxxi, x, xiii pp., and 3,000 figures.

Revision and correction of the semi-bituminous coal section at Wellersburg, in Somerset county, Pennsylvania. *Geol. Survey Pennsylvania*, with atlas to Reports HH and HHH, pp. 349–360.

1891. On an important boring through 2,000 feet of Trias in eastern Pennsylvania. *Proc. Am. Phil. Soc.*, vol. 29, pp. 20–24.

Artesian well in lower Silurian limestone at Parkersburg, Pennsylvania. *Ib.*, vol. 29, pp. 45–47.

1892. A summary description of the geology of Pennsylvania, vols. i and ii, Laurentian to Devonian, inclusive, pp. xix, 1628.

1895. The same, vol. iii to p. 1854, Pocono and Mauch Chunk.

In addition to the papers and volumes already mentioned, Professor Lesley prepared elaborate prefaces and letters of transmittal to accompany the reports of his assistants on their respective districts, not less than twenty-four in number. In compiling this list the writer has made full use of Mr. Darton's work.*

* Catalogue and index of contributions to North American geology, 1732–1891. By Nelson Horatio Darton. U.S. Geol. Survey, Bull. No. 127, 1896.

APPENDIX G

J. PETER LESLEY

BY PERSIFOR FRAZER

(From the *American Geologist*, Vol. XXXII., *September*, 1903.)

PORTRAIT—PLATE XIX.*

By the death of J. Peter Lesley, the old-time type of scientific man is left almost without a representative. He was born in Philadelphia on Sept. 17th, 1819. After completing his studies in the University of Pennsylvania, in 1838, he was appointed an assistant of Professor Henry D. Rogers, on the First Geological Survey of Pennsylvania. Though his services were used in various regions, he was assigned to field work, chiefly in the bituminous coal measures, but also in the anthracite region.

On the temporary pause in the prosecution of this Survey in 1841, he studied Theology, in the Princeton Seminary, from 1841 to 1844, interspersing his religious with much secular work for the Geological Survey.

Nature combined in him an artist and topographer in a degree rarely witnessed, and it was manifest that he never could forsake, for an indefinite time, the field in which he stood without a rival. By a legitimate use of the imagination he transformed many apparently incongruous field notes into orderly structure, often revealing new laws of plication, which afterwards proved of inestimable value in calculating the available mineral treasure in a given area.

It was no wonder that Henry D. Rogers could not dispense with Lesley's services, either while a student at Princeton or later, when the Pennsylvania legislature renewed the appropriation for a final report. In the mean time he had concluded his studies and received his license to preach in 1844, upon which he went to

* Sincere thanks are rendered to the Editor of "Mines and Minerals" for permission to use this plate, which is considered by Professor Lesley's family the best likeness of him. [This portrait is placed opposite page 452. —EDITOR.]

Europe and studied in the University of Halle during the winter of 1844–45.

Returning to America he became a colporteur for the American Tract Society in Northwestern Pennsylvania. Going to Boston in 1846, at the instigation of Professor Rogers, he accepted the pastorate of a Congregational church in Milton, Mass., and officiated there till 1851, when in consequence of a change of his religious views he gave up his ministry and returned to Philadelphia as a reporting geologist.

The clear insight into the complicated geological structure of his native state which his studies in constructing the geological state map had given him, caused his opinion to be sought from all parts of the country; for not only was the capital from many states interested in the oil and coal of Pennsylvania, but from the completeness of its presentation of the paleozoic rocks their interpretation there furnished the key to their structure elsewhere.

He never organized this great business, which would inevitably have realized for him a large fortune, but attended to it personally as far as he could and let the remainder go.

He was very much hampered in geological reporting by his duties as secretary of the Iron and Steel Association; secretary of the American Philosophical Society; and editor of the Bulletin of the one, and of the Transactions and Proceedings of the other. These latter occupations chained him in Philadelphia, while his professional engagements in examining mineral properties would have furnished field occupation to two men like himself during the entire year.

It was these conflicting duties and demands which kept his sensitive mind in continual distress and brought about a nervous exhaustion which compelled him to seek relief several times in Europe. In addition to his engrossing editorial duties above referred to, he published in 1859 for the Iron and Steel Association the "Iron Manufacturer's Guide," a large volume of permanent value, and carried out a new and original system of cataloguing the extensive library of the American Philosophical Society. Besides this, he was the "presenter" at the fortnightly meetings of the Society, the active recorder of its minutes, the suggester of its policy, and, principal framer of its resolutions to carry that policy out. He took part in most of the discussions (which indeed seemed tame, when his pleasant, mellow voice was not heard), and, when nothing of interest was before the Society, drew upon his stores of information in order that those who had taken the trouble to attend might not depart without profit.

In 1872, on the reorganization of the faculty of the University of Pennsylvania, he was elected by the trustees professor of geology and mining, and dean of the faculty of science. In 1874 the state of Pennsylvania established a second geological survey, and Lesley was named as director. The hundred volumes and thousands of maps and sections of this survey will be his most enduring monument. Every line of text and illustration in the survey passed under his eye, and not infrequently he made alterations in both,—sometimes without the approval of the author and in such cases in disregard of his own vehement protest against similar action of his former chief, H. D. Rogers; but he always believed such alterations absolutely necessary.

The character of Professor Lesley was composite, but wholly noble. He was really two closely united men: the one, an artist and *Schwärmer* to the tips of his fingers; a master of persuasive elocution, of incisive rhetoric, and of the subtle art of design with pencil and brush. He was an enthusiast and an optimist—all this by nature. But another man was intertwined with this natural man, viz., the artificial business man, whose duty it was to keep severe watch over the natural man's expressions and judgments, to reduce his speculations to the practicable, and to lower the tone of his professional utterances from inspiration to business. This man was often lamentably melancholy, undemonstrative and even cynical, yet from a trifle which happened to strike his mind in a certain way the entire artificial man was thrown off in an instant and he was the genial, hopeful, natural Peter Lesley once more.

Impressionable and emotional, as are all artistic temperaments, there was nothing sordid or base even in his faults, which were chiefly due to an abstraction which often made him oblivious of the present, and sometimes impaired his appreciation of the relative proportions—the mental perspective—of things. He was generous to prodigality towards others, while careless of his own ease and comfort. "Plain living and high thinking" was the motto on which he moulded his life. His tall and rugged figure, imposing though disdainful of the embellishment of dress, reminded one of Abraham Lincoln; which comparison was strengthened by his rich and musical voice. His phrases were choice, clearly enunciated and full of imagery, and his lectures comprehensive and graceful. When, warming with interest in what he was saying as often happened, his sad expression melted into one of enthusiasm and smiles, the atmosphere around his auditors seemed lightened as when the sun breaks through a cloud. Like the late lamented

Dr. Joseph Leidy he hated the intrigues and animosities inseparable from holding one's head above water even among the illuminati, but unlike Dr. Leidy he was not uniformly successful in keeping out of such unpleasantnesses, and when once in he rendered yeoman's service with tongue and pen for the side he thought in the right, which was most frequently the winning side.

He seemed a born interpreter of phenomena, so vividly his imagination pictured the course of events which led to them; and it is not surprising that the evolution of language from the simplest ideographs and symbols of the earliest races enchained him. Thus he threw himself with heart and soul into Egyptology and evolved a world of curious interest from the mystic letters B A R. His hieroglyphs, which decorated as borders several apartments of his house, 1008 Clinton St., Philadelphia, were beautifully done, as was every map, page of manuscript, or illustration from his pen or brush.

His friends were devoted to him, as he to them, so that, although many sorrows and disappointments crossed his path, their constancy, and still more the gentle elevating influence of his wife and daughters, gave him a balance of happiness for which the average man might be justly grateful, though it was well deserved.

He died peacefully in Milton, Mass., on June 1st, 1903.

He was among the first geologists to contribute to our understanding of the rock oil problem; he was one of the original members of the National Academy of Sciences; president of the American Association for the Advancement of Science, 1884; U.S. Commissioner to the "Exposition Universelle," 1867; author of "Man, his Origin and Destiny from the Platform of the Sciences," "Coal and its Topography," etc.

On February 13th, 1849, he married Susan Inches Lyman of Northampton, Mass., by whom he had two daughters, all of whom survive him.

APPENDIX H

OBITUARY OF J. P. LESLEY, A.M., F.G.S., LL.D.

BY BAIRD HALBERSTADT, F.G.S.

Professor J. Peter Lesley, State geologist of Pennsylvania from 1874 to 1895, died at Milton, Mass., June 1, in the eighty-fourth year of his age, after a long and useful life. The name of Lesley is so closely interwoven with the geology of Pennsylvania as to be almost synonymous with it. Not only was his genius exhibited in the masterly solution of the great problems in structural geology of the anthracite fields of Pennsylvania, but, likewise, in every section of the State, and he leaves behind him imperishable monuments to his genius in the Reports of the Geological Survey of the State, his "Manual of Coal and its Topography," and other contributions to American geology.

Mr. Lesley was born in the city of Philadelphia, Pa., in 1819, and graduated at the University of Pennsylvania with the Class of 1838. In 1839 he was appointed an assistant to Professor Henry Darwin Rogers, State geologist, and assigned to the anthracite region, his associates being James D. Whelpley and Dr. Andrew A. Henderson, the former remaining until June of that year, while Dr. Henderson was assigned to a separate district. Mr. Lesley remained alone to collect data from the collieries and to enlarge the borders of Mr. Whelpley's map of the anthracite region.

In 1840 Mr. Lesley made his topographical and geological sketch map of the Devonian and Silurian belt between the Kittanning Mountain on the south and the Pottsville-Mauch Chunk (Panther Creek) coal field on the north. Upon completing this, he joined Mr. Hodge, and with him surveyed the Somerset and Fayette County coal basins.

In 1841, with a single companion, he made a topographical and geological reconnaissance in the Fourth and Fifth bituminous coal basins, and later in the year added to Whelpley's anthracite

map "what had been omitted and what had been exposed to observation by later mining operations."

In 1842, the legislature failing to appropriate funds for the continuance of the work of the survey, "because of the financial embarrassments of the Commonwealth," the work came to a close, and the survey corps of 1841, composed of Messrs. Sheafer (P. W.), Hodge, Trego, Ward, Jackson, Henderson, Holl, McKinley, Boyé, and Lesley, was disbanded, and its members became widely separated.

At this time Mr. Lesley "indulged in the luxury of a course of theology at Princeton," and during his vacations in the summers of 1842 and 1843 made the topographic and geologic map of the State and also a number of sections across the State from data collected by himself and other assistants. This work was one filled with many difficulties, the principal one was the very imperfect map upon which the geologic lines were to be laid down. The State map, the only available basis for the geological map, he characterized as a "wilderness of blunders, more or less absurd"; yet he harmonized a heterogeneous mass of material placed in his hands and produced a skeleton map which, he says, "was *tempered* like a pianoforte; being erroneous throughout, but with all the local errors reduced to a minimum." The completion of this map occupied eighteen months.

In 1851, due to the efforts of Mr. Wm. P. Foulk of Philadelphia and Mr. P. W. Sheafer of Pottsville, the legislature made an appropriation of $32,000 "for the revision and publication of the final geological report," and field work was resumed. The field parties were made up of Professor Rogers, Messrs. P. W. Sheafer, John Sheafer, Édouard Désor, and Léo Lesquereux; Mr. Lesley remaining at headquarters, placing the data obtained by the field geologists on paper. The reports not being published, Professor Rogers, in 1855, arranged with the State to publish them himself, and the entire mass of data collected then became his personal property, and the copyright of the report belonged to him. It was published in Edinburgh, Scotland, in 1858.

Graduating from the Theological Seminary at Princeton in 1844, Mr. Lesley pursued his studies further at the University of Halle (Germany). Returning to America, he again assisted Professor Rogers in 1847–48. In the latter year he accepted a charge, becoming the pastor of a church of the Congregational denomination in Milton, Mass. Resigning in 1851 his pastorate, he resumed geological work under Professor Rogers.

From 1859 to 1883 he filled the chair of Professor of Geology and Mining in the University of Pennsylvania, in the latter year being made Professor Emeritus.

In 1874 the Second Geological Survey was begun, the legislature having made an appropriation for this purpose. In selecting the Board of Commissioners of the Survey, Governor Hartranft displayed excellent judgment. The men comprising the board were selected from various parts of the State. All were prominent and efficient, and they were determined that the work should be properly done. As political influence played no part in the selection of these men, it was, naturally, expected that they would select for the important position of State geologist and director of the great work then about to be inaugurated, and upon whose judgment so much depended, a man peculiarly well adapted for the position. The *ideal* man was found in J. P. Lesley. Enjoying, as he was at the time, a very extensive and lucrative practice, Professor Lesley, at a financial sacrifice, accepted and entered at once upon the duties of the office. Time and again the wisdom of the board, in his selection, has been demonstrated, for there was no one as well fitted by training and experience as he. His wide acquaintance among men prominent in the development of Pennsylvania's mineral resources and his sterling integrity gained for him at once the confidence of the people.

He was then fifty-five years of age, and his geological experience had extended over a period of thirty years. For nearly twenty years he directed the work of the Second Survey. Unfortunately, failing health forbade his completing the Final Summary Report, and that part of it, comprising the geology of the anthracite and bituminous coal fields, was completed by Messrs. Smith and d'Invilliers.

Professor Lesley, in 1892, removed from Philadelphia to Milton, Mass., where he resided up to the time of his death. From 1854 to 1858 he was secretary of the American Iron Association, and in 1859 he was elected secretary of the American Philosophical Society, which office he held up to 1885. President of the American Association for the Advancement of Science in 1884–85, he was also honored by election to membership in many learned societies, both in the United States and Europe. Upon him, in 1878, Trinity College (Dublin) conferred the honorary degree of LL.D.

As a writer, he was forceful and elegant. In fact, as a word-painter, he had no superior and but few equals. His style of writing, while always elegant, was remarkably clear, and his

governmental reports were as such reports should be, so written that they could be read and studied by the layman as well as the scientist.

Great as a scientist, Professor Lesley was also great as a man. No man had a kindlier disposition. He was incapable of harboring ill will toward any one. He was charitable, perhaps, even beyond his means. A giant in debate, yet he always regarded the feelings of an opponent. No man could associate with him without being better for it. His great knowledge was always at the disposal of his friends. He was a man of herculean frame, and yet as gentle and guileless as a child.

For three years the writer was more or less closely associated with Professor Lesley, and during this time he learned to know him. As time went on, respect for him grew into reverence, and what were, perhaps, the happiest moments of the writer's life were those spent in the society of this great and good man, whom he honored and revered as his master.

In the writer's opinion, humble though it be, fame has placed the name of Lesley among the ablest geologists of modern times, and of him it may be most truly said, "he was a man of infinite scope and love in science, a poet by divine right, pure-hearted and true to every duty."

Truly, his whole life was well spent.

APPENDIX I

BIOGRAPHICAL NOTES OF J. P. LESLEY

BY SIR ARCHIBALD GEIKIE

From the anniversary address delivered by Sir Archibald Geikie, Sc.D., D.C.L., LL.D., Sec. R.S., Vice-President of the Geological Society of London in 1904:—

[Passing over most of the biographical items, I quote:—]

J. P. Lesley, one of the most distinguished and lovable men of science in the United States, was born at Philadelphia on September 17, 1819.

. . . Those who have travelled through the Carboniferous region of Pennsylvania, or have studied the excellent detailed maps of it which the State Surveys have published, will not wonder at the claim made by Lesley that "topographical geology was born" in that State; nor will they fail to note how easily and irresistibly Lesley was led into that domain of geology where he became so pre-eminent a master. The contours of the surface depend so directly and clearly upon curvature and fracture of the terrestrial crust on the one hand, and upon the results of erosion on the other, that in few tracts of the earth's surface is this relationship so readily grasped, or appeals so powerfully to the imagination.

Before he was one-and-twenty Lesley had constructed his first topographical and geological sketch-map, which earned the commendation of Rogers "for the faithful and laborious manner in which he had unfolded the geology of this occasionally complicated zone of the country." His scientific career, however, was soon arrested by the refusal of the State Legislature to grant any further appropriation for the continuance of the Survey, and by the consequent disbanding of the staff of assistants. Thus thrown back upon himself, the young geologist turned once more to the line of life [theological] which had been originally marked out for him. . . .

While working at Hebrew and theology, however, he found

time, at Rogers's request, and with much patience and skill, to put together the mass of materials that had been gathered by the assistants for the construction of a colored topographical and geological map of Pennsylvania. In this laborious task, as in all his subsequent labors, the value of his early training in drawing became strikingly conspicuous.

. . . He took a trip to Europe in 1844. . . .

His eyes being now opened to the perception of geological structure, he made good use of his opportunities in Dauphiné and in the Jura, where he could compare the plicated rocks of these classic regions with those which he had learnt to understand at home. He found in the Swiss ground proofs of "the ancient action of similar forces under the same laws, but in less detail and with far less delicacy." . . .

At the end of the following year (1846) Rogers, who had never lost sight of him or of the possibility of winning him back to the geological camp, induced him to come to Boston and spend five months there in duplicating the State geological map and longitudinal sections which he had drawn while at Princeton, together with some hundreds of other drawings, besides preparing a large part of the text of the Final Report. But the Legislature refused to grant money for their publication. Lesley, however, still clung to his ministerial calling, and towards the end of the year 1848 became the pastor of a Congregationalist church at Milton. . . .

. . . The Pennsylvanian Legislature in April, 1851, at last made an appropriation for the renewal of the Geological Survey, and Rogers immediately secured Lesley as one of his chief assistants, his main object being to get the maps reduced and published, together with the Report. Owing to various causes, the publication was delayed for some years. But meanwhile Lesley's topographic power became generally known, and brought him private employment. In 1853 and 1854 he was engaged by the Pennsylvania Railroad Company to construct a large map, which was distinguished by the adoption of contour-lines instead of hachures. He undertook other surveys or geological reconnaissances, not only in Pennsylvania, but in Southwestern Virginia and Southeastern Tennessee.

In the midst of these avocations he found time, in the winter of 1855–56, to write his memorable little volume entitled "Manual of Coal and its Topography, illustrated by original drawings, chiefly of facts in the Geology of the Appalachian region of the United States of North America, by J. P. Lesley, Topographical

Geologist." I well remember the pleasure with which, many long years ago, I first perused this original and suggestive treatise. It could only have been written by a man who, gifted with a keen eye and artistic power, had been enabled to cultivate his observing faculties in a region where the fundamental facts of geological structures were displayed with altogether exceptional clearness. It dealt with topography as no one had attempted to deal with it before, treating it both as a science that classified the various features of the land which are determined by geological structure, and likewise as an art deserving of the most scrupulous care in its cultivation on the part of the cartographer. "The face of the earth," he significantly wrote, "is the face of a great angel, with infinite smiles and anguish-lines, and profound sympathies with peace and suffering stamped upon its features. Every lineament is a line of tragical history, full of pathos and sublimity." If such was his conception of landscape, we can readily understand with how deep an artistic feeling he must have undertaken his work. "The topographer," he tells us, "if a true artist, will put himself in true relations with this grand mute object of his study, and learn its own record of its wonderful experience, if he will picture the earth as it is. The draughtsman must first be a geologist." Only a small edition of this remarkable book was published, and it was never reprinted. Hence it has been much less widely known than it well deserves to be. . . .

University avocations kept his hands sufficiently full of work, when, in 1874, he received the chief appointment of his life, that of State Geologist of Pennsylvania. . . .

How well he fulfilled the task which he set before himself, and to which he devoted the unceasing labor of some twenty strenuous years, those geologists can best appreciate who have made acquaintance with his voluminous Report. At last, worn out with his exertions, he had, in 1893, to lay down the pen, when the last coping-stone of the great work of his life had still to be placed.

The printed reports and map-atlases of the Second Geological Survey of Pennsylvania extend to no fewer than 120 volumes. Throughout these the hand of J. P. Lesley is everywhere apparent. He was the life and soul of the enterprise, firing his subordinates with some of his own ardor, training them in his methods of observation and topography, editing and sometimes necessarily rewriting their ill-expressed reports, but generously giving them full credit for all their work, even where much of it might have

been his own. The volumes of the Final Reports, more than half of them from his pen, present a singularly impressive picture of the extent and value of a Survey which will be classic in geological literature, and will form the noblest monument to the genius of J. P. Lesley. . . .

Lesley was upwards of six feet high and, at least in his later years, broad in proportion. His face, with its large well-formed nose and mild eyes, was marked by a strong individuality in which firmness and kindliness were equally represented. He had great powers of conversation, and a remarkably winning manner which irresistibly attracted those who were thrown into personal contact with him. I shall retain as long as memory serves me the recollection of him in the midst of his Philadelphian home, with his charming wife, his two daughters, his piles of cases of maps and reports, and his geological assistants chivalrously on the alert to anticipate his wishes and to carry out his instructions.

He had been elected a Foreign Correspondent of our Society in 1866, and was promoted to the rank of Foreign Member in 1887.

APPENDIX J

LESLEY'S "SURVEY OF PENNSYLVANIA"

BY CHARLES G. AMES

(From the *Christian Register*, July 8, 1897.)

No one of the twelve labors of Hercules can be compared with the "Second Geological Survey of Pennsylvania," —an undertaking of scholarship and skill which has required for twenty years the co-operation of a large force, and has been under the masterly direction of Prof. J. P. Lesley, LL.D., and now an ex-president of the American Association for the Advancement of Science. His "Summary of the Final Report" fills 2,660 pages, of which the last 767 are by another hand, the overtasked chief having broken down under the heavy and protracted strain. Always prompt and generous in recognizing the services of his loyal corps of assistants, he has yet continuously added to the duty of superintendence an infinity of detail, so that every page of the hundred and twenty-nine volumes of reports, with countless maps and charts, and an illustrated dictionary of thousands of fossils,—itself a monumental work,—has passed under his own eye; and much of it has been the work of his own hand. Never was human enterprise pursued with more complete industry, fidelity, and devotion.

Pennsylvania includes in its area of forty-five thousand square miles not only vast mineral deposits of coal and iron,—whose location, extent, and quality required to be measured, mapped, and described for economic reasons,—but an assemblage of geologic forms and features full of scientific interest, so that the Survey reports will furnish a wealth of knowledge and suggestion for ages to come. Not least in importance are the unsolved problems continually brought to light by such researches into the arcana of nature. Dr. James of Hingham, writing of this work in the *American Geologist*, bespeaks the gratitude of the world to Prof. Lesley for his vast contribution to scientific knowledge, though aware that to the majority his work will be chiefly valued for its bearing on material development.

Dr. Lesley's chapter on Geologic Time is fascinating reading, and seems to put our dear old globe in a setting of infinity. He says: "The ordinary ideas of time cannot be applied in geology, because they exceed all ordinary modes of measurement. Geol-

ogy deals with such vast time-epochs that for all practical purposes time is infinite. Science, especially the science of geology, dispenses time as the commonest drug in the market. . . . The idea of precise time is the product of the routine of civilized human existence. It is unknown in the vegetable and animal worlds: it is disregarded by nomadic races. The idea took root when the home was organized by women, and meals were cooked at fixed hours of the day. It became confirmed when superstition organized priestcraft, and religious ceremonies demanded a calendar. The moon was the first clock. . . . Even now, with all the chronometers of Christendom, it is still a fact that nineteen-twentieths of the human race have never seen a clock, and have no need of one."

He shows how geological time may be estimated by the rate of deposit, or of erosion; and, using the Juniata Valley as a means of calculation by erosion, he estimates that some 13,560,000 years would have been required to bring the country to its present level. But this conclusion rests on a far broader basis: he brings together the results of many observations in various parts of the Old World.

We are accustomed to think of our continent as having always presented the same general features. Quite otherwise is the view of our much-observing and much-meditating student. He believes that a range of mountains as lofty as any now seen in South America or Asia once stretched, parallel to the present Alleghanies, from where the St. Lawrence now is to where the Gulf of Mexico now is, and that our present continental area was not produced without a cataclysm. The Appalachian Sea became dry land, and ultimately the tomb of vast forests, which are now deposits of coal. Thus, during inconceivable periods, inconceivable changes have taken place. Mountains have melted, the waters of deep sea have gone to sleep and to toss in other beds, whole orders of creatures have appeared, matured, and disappeared; and this home has been made ready for our occupancy by forces whose methods of action are hinted by the processes which are still going on before our eyes. One can hardly help citing the lines of Tennyson: —

"There rolls the deep where grew the tree.
O earth! what changes hast thou seen
Here, where the long street roars, hath been
The stillness of the central sea.

"The hills are shadows, and they flow
From form to form, and nothing stands:
They melt like mists, the solid lands;
Like clouds they shape themselves, and go!"

APPENDIX K

PETER AND SUSAN LESLEY*

A MEMORIAL DISCOURSE, PREACHED IN THE CHURCH OF THE DISCIPLES, BOSTON, JANUARY 24, 1904, BY CHARLES GORDON AMES

"It is appointed unto men once to die, and after this cometh judgment."—HEBREWS ix. 27 (Rev. Ver.).

Every day, by speech or in silence, we pass judgment upon our fellows; and, when they die, we sum up our little imperfect knowledges, mixed with guesses and impressions, and pronounce a qualified sentence of praise or blame for "the deeds done in the body." This fact of itself has made thoughtful men in all ages regard death as a solemn crisis in the history of a man. It is the closing of a chapter, the making up and balancing of an account. Our moral sense, in its small way, affirms that every man must at last pass for what he is, when his life is reviewed and his character scrutinized by the All-seeing.

And how long is the scale of differences! There are all grades of excellence and defect, of merit and demerit, of honor and shame. The clod and the nugget, the pebble and the gem, do not differ more than one man and another. In reviewing some lives, we seem to traverse dreary wastes of sand: in others, we are exploring gold mines and diamond fields.

The nineteenth century yielded a rich product of good men and women: death and heaven are still gathering the glorious harvest. The younger generation—so soon in its turn to become the elder—will be impoverished so far as it misses the knowledge and inspiration of such a record. For the best lives, whether great or humble,

. . . . "All remind us
We can make our lives sublime."

* J. Peter Lesley, born Philadelphia, September 17, 1819; died Milton, Mass., June 1, 1903. Susan Inches Lesley (*née* Lyman), born Northampton, Mass., April 7, 1823; died Milton, January 16, 1904.

They reprove our neglect, shame our cowardice and sloth, exalt our ideals, and encourage our aspirations. And all just praise to those who have lived wisely and well is really praise to Him from whom cometh every good and perfect gift.

On the 4th of June last, some of us stood in awe around the silent form of Peter Lesley. Rarely have I seen a nobler face in flesh or in marble. We do not talk of any man we have known as perfect. But, after all allowances and deductions for human faults, weaknesses, limitations, and infirmities of temperament, few men of his time have showed such a handsome sum of personal qualities and services. And when, on Tuesday last, we gathered again in the same Milton cottage, and bent over the precious dust of Susan Lesley, I think the judgment as well as the feeling of those who had known the true story of her fourscore years concurred in the verdict of one who said, "No possible words of praise could seem extravagant." United in life, in death they were not long divided.

Peter Lesley was a city boy, son of a Philadelphia carpenter, a man of high-strung nerves, but of sterling sense and Christian virtues. The children were taught the use of their minds, their eyes and hands; taught also to revere God and keep the commandments. This lad was a passionate lover of knowledge, especially devoted to language and science, and passed swiftly forward in school and college to a course in divinity at Princeton, — more than eighty years after the brief presidency of Jonathan Edwards, who was still the patron saint. These stages were only the beginnings of a course of lifelong study, pursued with a single eye to truth and duty. Any well-born youth who enters on his earthly career with such endowments — such fine possession of his bodily and mental faculties, such keen relish for knowledge and such high purpose — will not be hindered from mounting toward the heights by the difficulties of climbing, by scanty means, precarious health, or any conquerable obstacle. It was toward the higher levels that this young man had put himself in motion.

In 1844, having been licensed to preach by the Presbytery of Philadelphia, he went to study for a season at the University of Halle, in Germany; then for about two years he travelled in Pennsylvania as evangelist and colporteur of the American Tract Society; but from 1848 to 1851 he was pastor of the Congregational church in Milton, Mass. Meanwhile he found himself suspected and accused of unsoundness of doctrine. The pressure of ec-

clesiastical authority affected him like a usurpation, or a denial of Christian liberty, to which he could not submit without violating the higher injunction to "call no man master."

The same impulse of honesty and faithfulness that led him into the Calvinistic ministry soon led him through it and out of it, and made him a man of science and a practical servant of mankind. Withdrawing from the pulpit about 1852, he settled in Philadelphia, and devoted himself to science, and especially to the study of geology, in which he rapidly rose to distinction as an authority and to eminence as an expert. His Alma Mater, the University of Pennsylvania, offered him the professorship of geology and mining and made him dean of the scientific faculty. There were various intervals of foreign travel, which brought him into relations of pleasure and profit with eminent men of science.

In 1874 began the great work of his life—a mountainous work—as head of the Second Geological Survey of Pennsylvania. In his youth he had shown aptitude and ability in the service of the First Survey, and had won the recognition and confidence of his chief. He was already fifty-four years old, and had been admonished of constitutional liabilities by sharp crises of nervous suffering.

Whether an official position shall mean little or much depends on the man who accepts it. The Secretary of the Board of Education was little regarded in Massachusetts until Horace Mann was appointed. His industry, breadth of view, and enthusiasm made it as important as the office of the governor. As chief of the First State Survey of Pennsylvania, Henry D. Rogers had set a high standard; as chief of the second, Professor Lesley carried it to pre-eminence.

Conceive the magnitude of his undertaking. He must master the substructure of the earth's surface as a surgeon masters anatomy. He must carefully select and organize a large staff of assistants, and direct their operations over a wide area of forty-five thousand square miles. He must fix and delimit, so far as possible, the location and extent of every deposit of useful minerals—iron, coal, petroleum—in a State where the development of these industries gives employment to many thousands of men and many millions of capital. He must produce and verify from actual field surveys maps and charts which present to the eye the courses of the streams, the altitude of the mountains and hills, the contour of the surface, the dip and uplift and contortions of the outcropping strata, in every township of the sixty-six counties. He must superintend the engraving and publication of these maps and charts

along with full letter-press reports of all the field and office work; and he must be responsible for the accuracy of every line and detail.

But it is not work that wears men out. Think what it means to carry such a load for twenty years, with limited and uncertain resources, irregularly granted by a succession of legislatures, subject to the vicissitudes of politics, and largely composed of ignorant men of narrow views and suspicious spirit, who could see in the Geological Survey only a put-up job to enable some kid-gloved city fellows to get their hands into the State treasury! There was also the antagonism or hostility of rival mining companies, or of greedy speculators in stocks and lands, who would gladly have loaded him with wealth if only he would have colored or discolored his reports in their interest.

He knew, too, that any serious neglect or mistake of himself or his subordinates would work public injury, would put weapons into the hands of enemies, and leave a stain upon his professional record. Yet, if not always serene, he was always dauntless, strong in his conscious rectitude and in loving respect for his work. He had no axe to grind. Like his friend Agassiz, he could not afford to make money; and, in trying simply to do his duty, he literally worked like a willing horse harnessed to a heavy load, on a long up-grade. Of course, it meant continuous overwork. But, when his friends urged the need of rest, he exclaimed: "Rest? Oh, how I hate the word!"

The printed reports of the Survey exceed a hundred volumes. But in 1895, when already past his seventy-fifth birthday, with failing sight and faltering nerve, he let fall into another hand the completion of the closing volume. He had been more careful to give credit to his lieutenants than to trumpet his own fame.

He lived eight years longer, but with a wrecked constitution, impaired fortitude, and permanent incapacity for sustained mental or physical activity. What soldier ever more truly gave life for his country?

Yet this is not the whole story. Through all the strenuous years he had kept in touch with the great world of thought, of art and humanity. Learned societies in other lands paid him honor. He had his turn in the presidency of the American Association for the Advancement of Science. He was long the Secretary of the American Philosophical Society, founded by Franklin.

He was a lover of nature. Striding across hills and through forests, with a geologist's hammer in hand and theodolite on shoulder, he still had an eye for beauty: the landscape shone and

danced around him; and the pictures of scenery then photographed on the walls of his mind were developed in those later years when the outer vision grew dim. Science had taught him also to look beyond the shows of things to their causes. He saw in the material realm the theatre of forces, such as play in the making of the globe or in building, binding, and bending the strata; he heard the

> "Chemic hammers, without sound,
> Smite and fashion under ground."

"When I look on a tree," he said to me, "I do not see a form of wood, but a form of life."

Yet I believe his chief interest was not in physical science, but in humanity. An altruistic principle mixed itself with all his work, and pervaded his thinking like an atmosphere. Disinterested kindness and generous appreciation won the confidence and affection of his staff, some of whom came hundreds of miles to share the last tribute of respect. On the business men and State officials who really met him he made the same impression.

Probably he suffered, as Darwin did, from partial atrophy of the finer intellectual perceptions and satisfactions, through long and close devotion to material concerns; yet he never lost his early and vital interest in literature, art, poetry, and the higher things of the spirit. This was apparent when he threw himself, with wife and daughters, into the religious movement which produced the Spring Garden Unitarian Society of Philadelphia. Occasionally he would drop all else and enter the pulpit or lecture-room, to surprise and delight his fellow-worshippers with a rich outpour of thought and feeling, illustrated by telling parables, drawn from stores of knowledge and experience. He also found or made time for notable contributions to the magazines and journals.

In 1865–66 he had given in Boston a course of Lowell lectures, which were published and republished under the title of "Man's Origin and Destiny, as Sketched on the Platform of the Physical Sciences." I was so fortunate as to read this stimulating and suggestive volume before I met the author, and so was prepared to do homage to his mind and to appreciate the honor and blessing of a friendship which was to last for thirty years.

Amid all the exactions and distractions of this man's life there was one reposeful centre. He once told me that up to his twenty-ninth year he had never met a woman for whom he deeply cared, that he had no thought of marriage, and regarded himself as a

candidate for early death. When Susan Lyman first crossed his field of vision, he started from a languid mood with an impression clear as a voice, "That is my wife!" The health of both was frail: the counsel of their friends was discouraging. But the man and maid thought, if their life together was to be short, the sooner it began the better. The engagement lasted but three months; and the married life, which began in 1849, extended to fifty-four years.

Says Victor Hugo, "The soul is the only bird that can carry its own cage." These two people became deeply interested in generous uses of their strength; and the more freely it was spent, the more it came. They found a life-preserver in work,—hard work, and a great deal of it. It was often done, like Saint Paul's, "in weariness and painfulness"; but it was done.

What is marriage? It is this, at least: the loving clasp and union of spirits; two lives in one, like the double cells of a single heart, each rejoicing in the happiness of the other. How sweet, gracious, and helpful may be the interchange of sympathy, sentiment, and thought! Each can tell to the other the deepest experiences, or can be understood without words and trusted without misgiving or question. Each helps to liberate, enlarge, illuminate, and complete the other's life. And the twain are nearer when a thousand miles apart than others may be who walk arm in arm.

Some dream or ideal of this kind probably unfolds in the mind of every well-born and pure-hearted lad or lass. Every marriage is genuine in proportion as it conforms to this ideal, even if it is rarely or never fully realized. Our human world would fly to pieces, as some domestic tragedies prove, if this sacramental element were wholly absent. The beautiful miracle is marred by every personal defect of temper, temperament, or conduct, by every shadow of incompatibility or unfaithfulness. It may be near the truth to say,—

> "The kindest and the happiest pair
> Will find occasion to forbear;
> And something, every day they live,
> To pity, and perhaps forgive."

All the more important is the wise and tender hint that comes from Saint Peter—that one of the Twelve who, as we know, was a married man with a mother-in-law—when he exhorts husbands and wives to "dwell together according to knowledge, as mutual heirs of the grace of life, in order that their prayers be not hindered."

All this, and more, belongs to my subject. Peter and Susan Lesley toiled together toward the summits of excellence. If they stumbled, it was incident to the climbing. Each left the other in unembarrassed freedom for movement, performance, and achievement. Each gave and received unbounded confidence. Each found cheer, comradeship, and comfort in labors, trials, and sorrows. Each was eager to shield the other from every hurt to body or spirit.

Beautiful was their community and communion of thought as well as of affection. Mrs. Lesley shared the scholarly and professional interests of her luminous-minded husband. If she could not keep step with the processes, she caught at the results with quick and eager insight; and he thought no flight too high for her soaring wings.

There were long, weary nights when neither could sleep for care or sorrow; and God knows how many causes they had for wakefulness. But they did not afflict each other with moans or gloomy bodings. She says, "We put our sorrows into a locked chamber, that they might not interfere with duty or happiness." Not so easy was it to dismiss their concern for others. For she also says, "The trials and the difficulties of our friends should be as sacred to us as our own."

She wrote down from memory some samples of what he said to her during the dark hours. Once he draws a grim and humorsome consolation from science. When he feels useless and in the way, he is comforted by reflecting on the part which nitrogen plays in the atmosphere. It is quite inert, it does nothing to keep up life or combustion. Oxygen has to carry on all the actual business: nitrogen seems to obstruct every process; yet, if nitrogen were removed, oxygen would flame up and burn the earth to a desert of ashes. Nitrogen is good as a restraint. The air has nine parts of nitrogen to one of oxygen. Human society requires nine fools to one sage, and all organized benevolence requires nine parts of obstruction to one of zeal.*

At another time he interprets to her the last words of Socrates to his friend: "Sacrifice a cock to Æsculapius." Was it superstition? No, indeed. It was his Greek way of saying, as he took the poison: "Praise to the god of health! I am about to die. This medicine will be my perfect cure."

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* This is a nocturnal exaggeration. The truer proportion of the two gases is as four to one.

For many years I had opportunity to observe the unstinted hospitality of the Lesley home in Philadelphia. Even when work was most pressing or rest most needed, the door was open to all comers; and there was deliberate arrangement for a succession of invited guests, with a preference for those who required, but could not afford, a change. Such burdens were borne ungrudgingly and as a matter of course. Heavier burdens that lay on the heart were lightened and partly forgotten in an unostentatious ministry to the pleasure and comfort of others. Often this required a careful economy of strength. I have known Mrs. Lesley, when passing through a course of physical depression, to shut herself up in the dark all day in order to collect strength to meet her evening guests with a smiling welcome.

Hospitality did not stop with table supplies. Her very life and soul were shared with others in a way to suggest the deep meaning of the words, "He that eateth me shall live by me." Any wise and good word picked up in book, conversation, lecture, or sermon, was to be "handed on like bread at sacrament." The range of talk was "from grave to gay," by no means always sober and solemn. Her fund of anecdotes was enriched from the quaint lore of old Northampton and Connecticut Valley, which always had a spice of its own.

About twenty-five years ago there sprang up a lively interest in the better organizing of city charities, in the care of destitute children, in the improvement of public education, in the planting of free kindergartens and day nurseries, and in bringing women of the prosperous class to make generous uses of their leisure. The house in Clinton Street became a semi-public resort. If any dozen or score of people desired to meet for consultation or to mature plans for social service, they needed not to hire a hall: here were their headquarters.

Diogenes went about with his lantern, looking for a man. Mrs. Lesley was always eager to discover and bring forward men and women of the right spirit and of capacity for promoting the humane interests which were on her heart and hands. Great was her joy when she found a coworker to trust,—a combination of common sense, sweet reasonableness, and tact. Sharp was the pain when it appeared that her confidence had been misplaced. But she learned not to expect too much of poor human nature; most of the world's work must be done by imperfect instruments, if it is to be done at all.

Such activities brought her in contact with all sorts and conditions of people,—wise and otherwise, agreeable and disagree-

able, generous and selfish. She had no Pharisaic affectations of infallibility, and could work with a minimum of friction, even when the conditions were trying to her feelings. She never fell into a habit of censoriousness.

"She saw the good in others, passed the evil by."

A man of large usefulness and many fine qualities had not always been considerate. After his death she wrote: "I am thankful to remember that I never gave him one word, written or spoken, that I wish to recall. If there were misunderstandings, it was not his fault; and I only regretted it on account of the work."

So she went her way and did her part, "with malice toward none and charity for all." But she could take the responsibility. She could cut a knot which could not be untied. And she could speak the plain, unwelcome truth when the Golden Rule so required. Could she advise that Mr. X. be put in a position of trust and importance? "No, he would wreck any enterprise committed to his hands." She said afterwards, "It gave me unspeakable pain to say this: it would have given me a deeper pain not to say it."

She gladly sought and welcomed co-operation, but she did not wait for others. Like the Master whose example was her loving lifelong study, she helped the nearest sufferer. What if the Good Samaritan, who saw a man bleeding and half dead by the roadside, had said to himself, "Somebody ought to take care of this poor fellow: I will mention his case in Jericho or Jerusalem"? Mrs. Lesley saw not merely "charity cases,"—not merely masses and classes,—but individual men, women, and children. She blamed herself for missing any opportunity to help the helpless,—the worthy, the unworthy, or even the disgusting.

Here was a poor, honest fellow, deformed, and too weak for long walks. She arranged his street-car excursions with transfer tickets, and sent him to the park with a bit of luncheon.

In the House of Correction was a discontented and unhappy man, whose surroundings might make him more wretched and desperate. She sent him cheerful reading, and subscribed for the semi-weekly *Tribune* till his term should end.

She was an employment bureau for poor women in need of work. I recall one crippled dressmaker, whose weary day's work must end with a long climb to her lonely attic. For her was found a lodging up one flight and not far from the church which was her refuge and rest.

An Irish Catholic young man, with a family, a limited income,

and failing health, was known to her as a faithful servitor. She invited him to her summer cottage in Milton, took him to Nahant for a day's outing, to Manchester for another. "Dennis must soon return to Philadelphia," she said; "and I want him to take back all the good he can."

One evening a pleasant party had gathered in her parlor. We noticed her repeated disappearance from the company, and only learned afterwards that a young Englishman was dying upstairs. It had somehow come to the knowledge of the Lesleys that a stranger, stranded and penniless, was lying ill in comfortless lodgings and uncared for. They had him brought to their own home, as if he had been a son or brother. They learned from his grateful lips the address of his kindred, from whom he had estranged himself. After his death the two families exchanged greetings across the sea, and one brother came to pay them a personal visit.

"Why doesn't Mrs. Lesley get a new carpet?" asked some gossiping neighbor. The answer was, "A poor woman has come out of the hospital after an operation, and Mrs. Lesley has sent her to Atlantic City with a nurse."

She made large use of moderate means; but she collected for benevolent objects many thousands of dollars by appeals to her friends and to persons of public spirit,—appeals always in the form of letters and generally written in the quiet hours of early morning. She made it a rule to solicit contributions in this form rather than by personal interviews, for she thought those who did not care to give would find it easier to decline. Her considerate tact was rewarded by generous responses. She had acquired the confidence of a large circle of people, who believed she would not ask for money unless the dollars could be put to worthy use. In this propaganda she also employed printer's ink, procuring and mailing at her own cost no end of slips, leaflets, and pamphlets, selected and original.

In Miss Lucretia Hale's playful "Peterkin Papers," Mrs. Lesley figures as "the wise lady from Philadelphia." Her friends readily caught up the epithet, and used it in good earnest. Her speech and conduct were wise, and her open hand was guided by an open eye. She pondered every problem and situation that related to her work. Little wonder that women sought her counsel and that charity visitors studied her little manual. She might have applied to herself without irreverence or insincerity the words of Jesus: "I am among you as one that serveth." She prayed with both hands. She was kind to the unthankful and the evil.

There is a kind of social intercourse which is only a masked form of selfishness. She enjoyed to the full the society of interesting people, but was never on the hunt for the entrée of those selecter social circles where the cries of human distress are little heard and less heeded.

When Emerson died, she wrote me that from her girlhood he had impressed her as "a reverent listener." She knew what that meant. All through her life she heard voices and messages of the Spirit, as they came sounding down the ages and as they speak to the teachable mind. She meditated deeply the greater sayings of Old Testament and New, and was eager to

> "Seize upon Truth, wherever found,
> On Christian or on heathen ground."

Especially were the best things of Psalm and Gospel republished in her character, which was an illustrated edition of the Sermon on the Mount and the charity song of Paul. The whole course of her existence was educative to mind and heart and soul along the lines of the more abundant life.

The active earthly career of both these dear people was interrupted, suspended, and practically ended when failing health, declining force, and the growing burden of years detached them from the old vital interests. There was no permanent disability or breaking down till long after threescore and ten. Then crept on those shadows of mental disturbance and melancholy, to which in different ways they were both predisposed, first by heredity and next by too lavish expenditure of nervous force.

To Professor Lesley there came a time when all the brightness of science and philosophy gave him no clear ray, a time when his sublime faith in God and man was veiled by the black cloud of cerebral exhaustion. The brain-battery would not work, the will was enfeebled, the heart fluttered with apprehensions. Occasionally flashes of light would break like sunbursts through cloud-rifts! He would rise to full length and talk in the old joyous way, out of a well-stored memory, like a man inspired. So we knew that the sun in eclipse or at midnight is still the sun, and that the mood of a day or of a year is not the man. And ever

> "In the maddening maze of things,
> The toss of storm and flood,"

—when he seemed drifting rudderless, helpless, hopeless,—one anchor held. Not that God was good, but that Susan was good,

and their love an unchangeable fact. When he could do nothing for her comfort, still his unreasonable concern for her safety, which added to her suffering, was a testimony to his constant, undying affection.

Her one prayer was granted: If only she might live to see him through! Then, when all was over, and he was at rest, she lost herself in a fitful twilight of mystic sunset clouds, and disappeared whither he had gone.

There is a lesson of which we may have need, either for those who are dear to us or for ourselves. It comes from Gotthold Lessing's charge to his friends. It might be, he told them in substance, that through the weakness of disease or of old age he should lose his hold on the principles and convictions which had been formed with deliberation in the clear light and full strength of his faculties. What then? If he should retract his rational faith and relapse into superstition, he charged them to let it pass for what it really would be,—the wanderings and maunderings of a mind in disorder, no more to be regarded than delirium or nightmare.

The real record of the noble beings with whom we have spent this hour is not written in their bad dreams, nor in the sorrowful phases of their bewilderment. Let us seek it rather in the consistent direction and worthy achievement of their lives, and in the utterances of their calm and luminous hours. In those hours what was their outlook?

In 1884 Professor Lesley's brother Joseph died, after long disability and decline. Peter wrote me thus: "I do not grieve for Joe. He is just as present to me now, disembodied, as he has been for the last fifteen years. I have thought of him for fifteen years as dead and buried: still living, still speaking, loving, thinking of everybody's comfort, one with me in all my work, and yet unable to lift a finger to take part in my occupations. I shall so soon go to join him that his apparent departure first inspires me with no grief whatever. I have always loved men and women in the spirit, and not in the flesh. As far as I can remember, the death of the dearest friend caused only a momentary pang. My friends have always been eternal, immortal. I never change myself, and cannot comprehend any change passing on them. Neither God, nor the world, nor people, nor things, ever change to my view. . . . The most moody and uncertain of men myself, I am conscious of an absolute unchangeableness in myself; and I take it for granted that I shall never lose a friend."

So she writes after a bereavement, "To me all seems life, no death, only resurrection." And again at sixty-one: "Trying with failing powers to be content with doing less every hour of every day, yet with minds and hearts still open and with enlarged experience to urge us onward,—what does it mean? It must mean immortal life, with powers of recuperation in no distant future."

In a letter of 1884, after her aunt Kitty died, I find a passage which we cannot help applying to herself: "She leaves behind a most precious memory in our hearts,—a treasure laid up in heaven. I love to think of her as having laid down the weary burden of her last years. . . . She had such noble traits of character that the whole past seems glorified by them."

These are a part of the te timonies Peter and Susan Lesley gave when all their faculties were in highest and clearest activity. They are the messages of faith, hope, and love, which come to us now like whispered music from the lips that are silent. Life, they tell us, is a divine opportunity. Death is an incident by the way, —not a blind wall, but an open door. There is but one world—here, there, and forever. We are all related to all—to the highest, to the lowest.

So Peter compacts his life-sermon into six words: "Be God's child and man's brother."

And Susan breaks into the song of triumph which she heard from Dr. Furness above the sleeping form of one who had passed through the fire: "I reckon that the sufferings of this present time are not worthy to be compared with the glory that shall be revealed in us."

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